

GOVERNMENT OF INDIA

DEPARTMENT OF ARCHAEOLOGY

**CENTRAL ARCHAEOLOGICAL
LIBRARY**

CALL No. 737.402 Foy

D.G.A. 79.





THE ART
OF
COLLECTING
COINS

"One can learn more about a vanished race by handling the things their hands have made . . . or resting in the shadows of their mighty buildings ; one can learn more in this intimate way than by reading all the books that have been written. For the letter killeth, but the spirit haunts their old handiwork; and one can absorb it by the mere contact."

O. G. S. CRAWFORD—"Man and His Past."

THE ART OF COLLECTING COINS

A Practical Guide to
NUMISMATICS

15028 by

LEONARD S. FORRER

Fellow of the Royal Numismatic Society.

Foreword by

Dr C. H. V. SUTHERLAND

M.A., D.Litt.

*Deputy Keeper of Coins
Ashmolean Museum, Oxford.*

*Vice-President of the
Royal Numismatic Society*



737-4-02

For

Rd 706.9
For

ARCO PUBLISHERS



LIMITED: LONDON

1955

MUNSHI RAM MANIYER & CO. LTD.
*Oriental & Foreign Book Sellers,
Nal Sarai, DELHI.*

All Rights Reserved

CENTRAL ARCHAEOLOGICAL

LIBRARY, NEW WINDMILL

Acc No.

15028.

Daw.

25/2/58.

Call No.

737.402/Fot.

First Published May 1955

MADE AND PRINTED IN GREAT BRITAIN BY
THE GARDEN CITY PRESS LIMITED, LETCHWORTH, HERTFORDSHIRE
FOR THE PUBLISHERS
ARCO PUBLISHERS LIMITED, 10 FITZROY STREET, LONDON, W.1

TO THE MEMORY OF
MY FATHER
WHO FIRST TAUGHT ME
TO APPRECIATE THE
ROMANCE OF COINS



Foreword

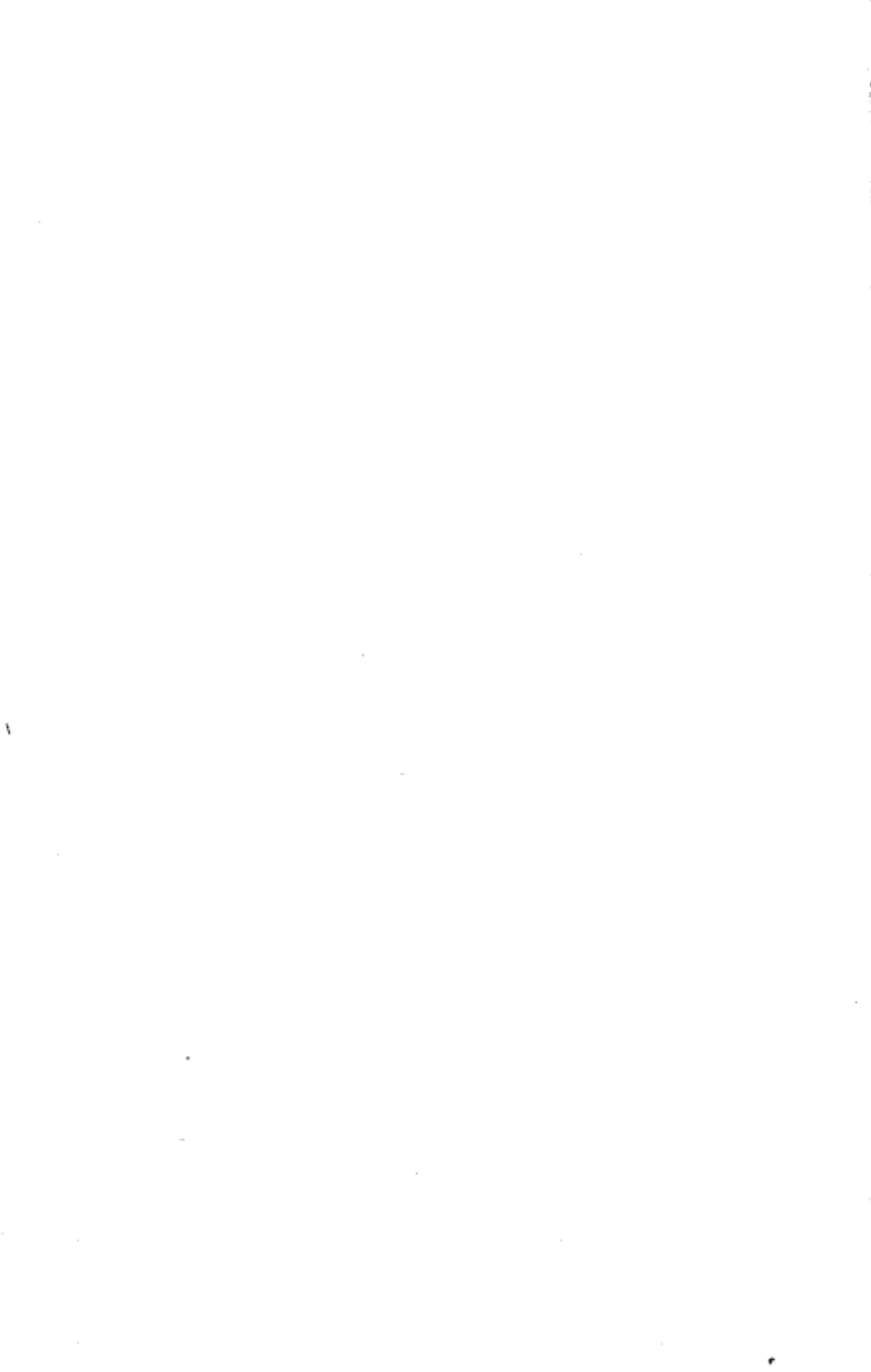
MANY books have been written on the collecting of coins. But few numismatists have attempted to discuss the art of coin collecting as such, with all the subtle questions of choice and taste which must be the governing principles of a collection. To take a broad and yet well-informed view of the great range of coinage, ancient and modern, besides all the medals made from the Renaissance onwards: to deal selectively and yet gracefully with this mass of material, and indicate the points of chief importance as they arise: to humanise the survey by relating it to the known experiences of collectors, without offending against propriety—these tasks call for inveterate qualities of knowledge and wisdom.

The author of this book has enjoyed great advantage. He was schooled in the art of numismatics by a numismatist (personally respected and loved by many) of rare achievement. From his father he could draw that broad learning, that apt touch and that essential humanism which alone can foster artistry in any pursuit of knowledge. And in the following pages, as it seems to me, Mr. Forrer well vindicates his own numismatic pedigree. His book teaches while it stimulates; and, while reason logically selects what should be collected, the eye is encouraged to delight in what it sees.

C. H. V. SUTHERLAND.

Oxford.

October 1954.



Preface

IT may seem presumptuous to bring out yet another book on the collecting of coins, but my forty years' experience as a coin dealer has convinced me that there is need for a simple explanation on the art of collecting coins. In my view there are large numbers of people who, though interested in coins, do not quite know how to set about the business of collecting. If they try some of the manuals they are confronted by technical terms, some of which are not self-evident, and their enthusiasm receives a check.

The aim of this work is to start from the beginning and leave nothing unexplained. No attempt will be made to deal with any particular series of coins in detail, but at the end of most chapters books on the subject will be indicated, whilst the comprehensive bibliography in the Appendix, divided into subjects and countries, will act as a pointer to further study once the would-be collector has decided on his particular field.

Another factor which induced me to take up this task is that so many of the earlier books on coin collecting are now out of print, both in English and other languages. This, too, is discouraging to the enquirer, as it may not be easy for him to find the particular book desired in any library to which he has access, and after all, it is so much more satisfactory to own a book rather than borrow it.

I would like to express my thanks to the many friends who, by their encouragement, have induced me to attempt this task; nor would I omit acknowledging my indebtedness for the general

PREFACE

idea of this book to an earlier effort on similar lines by H. M. F. Schulman and H. Holzer. To Dr. Humphrey Sutherland, who not only read the manuscript and made many valuable suggestions, but has also contributed such a delightful Foreword, I am more than grateful. And in my thanks I would also like to include Miss June Cumings for so patiently elucidating doubtful points, and Mrs. Patricia Parrent for hours and hours of painstaking typing.

For any omissions, errors and inaccuracies I crave indulgence and welcome criticism, believing in the truth of the Italian adage: *Meglio è fare e pentirsi che non fare e pentirsi*, which might be freely translated: It's better to write a book and regret it, than not to write . . . and regret it!

LEONARD S. FORRER.

London, W.I.
October 1954.

Contents

	<i>Page</i>
FOREWORD	7
PREFACE	9
INTRODUCTION	15
CHAPTER 1 THE MAKING OF COINS	19
How coins are made	
Coin shapes	
Metals	
CHAPTER 2 WHAT COINS TO COLLECT	26
Historical—Coins of one country	
Coins of two or more countries, closely allied	
Coins of one period of history	
Coins of an overlord and his feudatory states	
Coins issued by ecclesiastical rulers	
Coins of one particular ruler	
Emergency coins struck during sieges	
Coins issued by revolutionaries	
Coins of women rulers	
Geographical—Coins of one area	
Coins illustrating economic relations	
Colonial issues	
Local issues	
Coins with views of towns	

CONTENTS

	<i>Page</i>
Artistic—Sicilian and other Greek coins signed by artists	
Roman bronze sestertii of the first and second centuries A.D.	
Coins of the Renaissance	
Miscellaneous—Animals on coins	
Plants on coins	
Coins with two or more portraits	
Coins of unusual shapes and primitive currencies	
Coins with unusual legends	
Why collect coins?	
How to start	
CHAPTER 3 TECHNICALITIES	43
Weights and measures	
Fineness	
CHAPTER 4 THE FORMATION AND CARE OF YOUR COLLECTION	47
Legends	
Housing	
Degrees of rarity	
Condition of coins	
Cleaning coins	
CHAPTER 5 WHERE TO SEE COINS	57
Great Britain	
Europe	
Asia	
Africa	
Australia	
North America	
South America	
Numismatic societies	

CONTENTS

	<i>Page</i>
CHAPTER 6 THE DEVELOPMENT OF A COLLECTION	63
Coin dealers	
Auction sales	
Hoards	
Values	
Pedigrees	
Insurance	
CHAPTER 7 FORGERIES AND COUNTERFEITS	71
Methods of forging	
Style	
Electrotypes	
Paduans	
Freak coins	
CHAPTER 8 REPRODUCING COINS	77
Rubbings and impressions	
Photographs	
Plaster casts	
CHAPTER 9 TOKENS, JETTONS AND WEIGHTS	81
Tokens	
Reckoning counters	
Jettons	
Weights	
CHAPTER 10 UNUSUAL COINS, CURIOUS CURRENCIES AND PAPER MONEY	85
Small coins	
Large coins	
Unusual shapes	
Siege coins	
Primitive money	
Paper money	
CHAPTER 11 COMMEMORATIVE MEDALS, WAR MEDALS AND DECORATIONS	94
English medals	
European medals	
Plaques and plaquettes	
War medals	
Decorations	

CONTENTS

	<i>Page</i>
CHAPTER 12 THE HISTORICAL IMPORTANCE OF COINS	101
Greek coins	
Roman coins	
French denier	
English penny	
CHAPTER 13 BOOKS	109
On Greek coins	
On Roman coins	
On British coins	
On European coins	
On Colonial coins	
On American coins	
On Oriental coins	
On Far Eastern coins	
ENVOI	116
Appendix A.—A Select List of Numismatic Terms and Names	117
Appendix B.—A Select Numismatic Bibliography	157
PLATES	185

Introduction

SOME years ago a well-known doctor—who incidentally is also a coin collector—remarked on the undoubted fact that numismatists live to a ripe old age. On asking him if he could account for this from a medical point of view, he assured me that there was an adequate explanation. His view was that so absorbing a hobby tended to prolong life for two reasons: the tired business man, who comes home with problems oppressing him, is able to forget them when he turns to his coin collection; in consequence he sleeps better, and refreshed is able to confront his problems the following day with greater ability. Secondly, the problem of retirement is solved in advance, for instead of missing the active routine of his previous employment, the increased leisure allows him to devote more time to his hobby and to carry out long-cherished projects of rearrangement, of cataloguing, and of completing research into some aspects of his particular interest. This is instructive and encouraging, so that no apology is needed in commending the collecting and the study of coins to all who have the slightest interest in those metallic discs beyond what they will purchase.

As a hobby coins are fascinating, not only because reaching back to the early Greek period they cover a large part of the world's history for 2,500 years, but because they may be collected and studied in such a very wide variety of ways, many of which will be indicated in a later chapter. Coins are practically indestructible; even when worn it is often possible to identify them and derive

INTRODUCTION

the satisfaction of placing them in their right category. Then, too, the lure of the chase is never far away; what a delight to secure quite unexpectedly that elusive piece needed to complete one section!

It may be thought that the collecting of coins is an expensive pursuit. This is indeed a fallacy; there are categories of coins to suit all purses, and this applies just as well to ancient as to modern coins. Not even the rarest coin sold by auction has ever fetched the high prices of great rarities in the stamp market, and it is often possible to acquire many hundred copper and nickel coins for a very few shillings. Silver and gold coins are necessarily dearer, partly because of their intrinsic metal value, but even so, it is quite possible to collect them on a moderate income. It must not be forgotten, either, that an intelligently formed collection increases in value as the years go by, and is one of the soundest investments at the present time. There is an art, however, in collecting coins, and it is the aim of this book to provide the necessary guidance in that aspect, in order to prevent disappointment and discouragement to the would-be collector.

It may be of interest to recall some of the collectors who have crossed my path during the last forty years, partly as an encouragement to others to follow in their footsteps, and partly to show from what differing walks of life they were drawn. W. H. Valentine, who wrote three very useful books on Mohammedan and Indian coins, was a carpenter who was given an Indian gold coin to wear on his watch-chain. Intrigued by the Arabic legends, he taught himself to read it so that he might decipher his coin; from that small beginning and that determination grew his extensive and accurate knowledge of a really difficult series of coins. Oswald Fitch was a printer, whose interest in coins was aroused by printing the catalogues of a well-known firm of auctioneers, who in his day conducted many coin sales. Sidney Reilly was a fervent admirer of Napoleon, and made a really

interesting collection of that great Emperor; his leisure, however, was limited, as he could only collect during his visits to this country during 1919 to 1924, for most of his time was spent in Soviet Russia on confidential missions for our Foreign Office! Cumberland Clark collected Greek coins, but only of places he had visited, whilst Lady Blane always enquired for coins of Zenobia, Queen of Palmyra, and was never interested in any others. H. Bearman refused to have any coins sent to him by post, as his wife objected to his collecting—in fact, he kept his collection at the back of the parlour chimney! Old Mr. Mackerell decided to sell his collection of Roman coins owing to advancing years, and having accepted the cheque in payment went to the door with the purchaser, but suddenly sat down on the doorstep and burst into tears with the cry, "Please give me my coins back, I can't bear to part with them, but I promise you shall have them after my death." Admiral Prince Louis of Battenberg (later the Marquess of Milford Haven) collected naval medals, and his large three-volume work is still the standard book on the subject; whilst Canon A. C. Headlam (later Bishop of Gloucester) brought together a series of Greek coins illustrating the trade routes in the Mediterranean during the fifth and fourth centuries B.C. And what shall we say of the unknown collector whose coins were all pierced owing to a belief that they would preserve him from sudden death? He, alas, fell downstairs and broke his neck, so that his widow hastened to sell them lest they bring her bad luck too!

Such then have been collectors of coins in the past, along with a host of others, each one choosing some particular aspect of the hobby for his delectation. Nor must it be forgotten that many of the best-known collections, such as the Platt Hall, the Ryan and the Lockett, were begun by their former owners when still schoolboys. The pursuit is therefore open to all and its enjoyment barred to none.

At the end of most chapters a short list of suitable books will be

INTRODUCTION

listed, bearing on the subject-matter treated, and will also be included in the more comprehensive select Bibliography in the Appendix. The coins illustrated on the plates are but a few of the many one could have chosen, but it is hoped they will whet your appetite for more.

Chapter 1

THE MAKING OF COINS

THE collecting of coins for their own sake is not a new thing; amongst the Greeks there were lovers of fine coins, and it is certain that the products of such a city-state as Syracuse, where famous artists have recorded their signatures on their finest coins, were highly prized by collectors in those days just as they still are now. Amongst the Romans, too, there were collectors. We know that the Emperor Augustus owned a cabinet of coins and was keenly interested in the choice of types for any new coinage. The find of Roman gold coins in the foundations of a Roman villa at Vitry in Switzerland, where no two specimens were alike and all save one (out of seventy-two) are in beautiful condition, points not to a banker but to a collector, especially as half was buried in one angle of the room and the remainder in the opposite corner—no doubt in the hope that if half was stolen, the others would be overlooked.

In mediæval times, it would seem that the art of collecting was largely lost, although we know that Charlemagne did own a collection, and that some of the monastic collections were started very early. It was not until the Renaissance, with its emphasis on classical learning, that interest was aroused in the collecting of coins, particularly in Italy, where relics of Greek and Roman art became highly prized, and coins too came into their own,

inspired as they were by some of the lovely Renaissance medals by such artists as Pisanello and Matteo de' Pasti.

As the classical revival spread to France and Central Europe, so did the love of ancient coins, and by the seventeenth century most European princes and rulers owned collections and are known to have tried to rival each other in acquiring rare specimens. Nor were counterfeiters slow to take advantage of the situation, so that forgeries of that period exist and are not too easy to recognise. Quite a few books were written, in Latin, all of them dealing with classical coins, and many of them with woodcuts more or less accurately reproducing the originals. But it was not until Eckhel's *Doctrina numorum Veterum*, published in 1792-8, that an orderly system of collecting was first enunciated, and his work laid the foundation of all our modern approach to numismatics. He also started the first modern coin cabinet, at Vienna, about 1760, by order of Empress Maria Theresa, who transferred her own collection to form the basis of the new museum. In England the magnificent collections of coins in the British Museum owe their inception to an amalgamation of George III's and the Bank of England collections.

With the nineteenth century coin collecting really came into its own, and books on almost all branches of numismatics began to appear in many languages, making it possible to collect scientifically, whilst numismatic societies, by bringing like-minded people together, greatly extended the pleasures of collecting, and by publishing regular journals widened the circle of collectors in many lands.

This development has continued uninterrupted into the twentieth century, and whilst wars have brought temporary set-backs, they have increased the number of those interested in coins, an interest often first aroused through service overseas. There is therefore a wealth of accumulated knowledge available to the enquirer, and although the last word on many problems has

not been said, it is no longer necessary to study coins in isolation, nor to collect blindly.

How coins are made

"The Lydians," says Herodotus (i. 94), "were the first people we know of to strike coins of gold and silver." Although this seems categorical, there still is some doubt as to the actual origin of coins, since the earliest coins were struck in "electrum," a natural compound of gold and silver collected at Sardes from mountain streams. Generally it is agreed that coins originated in Asia Minor and are of the seventh century B.C., probably issued during the reign of Gyges (687-652 B.C.), the founder of the new Lydian Empire. Previously gold, silver and electrum objects had circulated on a barter basis, and the invention of coinage was really a labour-saving device, since these globular pieces of metal, impressed with a device on one face, were guaranteed thereby to be of a certain definite weight, so that they could be counted instead of being weighed. Originally the metal was heated and poured into plain moulds; when sufficiently cool the bean-shaped lump was then placed on an anvil on which a design had been engraved and driven home with a punch to take an impression of the device.

The next stage consisted in having a design engraved on both anvil and punch, so that both faces of the coin bore a type. In describing a coin the type from the anvil is known as the obverse, the other as the reverse; these are what are often called the head and tail. Improvements were gradually made in an endeavour to centre the types, for on some of the early pieces part of the design is often off the coin; therefore improvements consisted of having a rim round the design, or pins and holes in anvil and punch. Also some of the dies may have been hinged. From these early beginnings sprang the modern coins we know, through successive improvements, most of which date from the early sixteenth century when Bramante in Italy first invented the screw-press, so

that coins were struck through steady pressure instead of by hammer blows. In 1573 a metal rim or collar was placed for the first time around the blank; this had a twofold advantage, for it not only prevented the metal expanding irregularly, but also by providing a neat edge—often engraved with a legend—the practice of clipping or shearing off bits of the metal from the edge of the coins was prevented. Although the collar was first introduced in England in Elizabeth I's reign, it was discontinued until Charles II's coinage of 1662, when the legend DECUS ET TUTAMEN ("An ornament and a safeguard") was imprinted by the collar on the edge of his coins. A further refinement was the invention of the steam coining-press by Boulton and Watt in the early nineteenth century; this soon became the standard equipment of European mints. Since then coins have been struck with more and more mechanised precision, so that they all look alike, but the uniformity thus attained has largely been at the expense of artistic merit!

A word as to dies: Originally the dies—that is, the designs on both anvil and punch—were engraved direct by hand, and being somewhat brittle, a very large number must have been made, so that although the general type remained the same, there are innumerable differences, all of which added great variety to the coinage. A study of die varieties and die sequences in the Greek coinage is of fascinating interest and is of considerable value in arriving at the dates of the varied issues. In modern times the medallist supplies a large plaster model of his design; this is placed on a reducing machine, working on the pantograph principle, and the first or master die is then prepared from the resultant embossed model. The master die is never used; working punches (or dies) are taken from it, so that if any of them break during the process of striking, more can be made from the master die, thus ensuring exact uniformity.

Another process used for producing coins in early Roman

times was by casting metal pieces, originally in the form of bars, later in the form of large round pieces, usually in bronze, as dies larger than about an inch in diameter would not be strong enough to last for more than one or two blows. Casting was done by shaping moulds with the design or type in the negative; the molten metal was then poured into the mould and allowed to cool off. It was obviously a simple method of producing a coin, but too slow eventually for practical purposes. This process was soon abandoned and was only revived in the later Middle Ages, when the Renaissance artists wanted to produce large medals and no die would have been strong enough to support the weight of blows required to strike them.

Cast coins were also produced in China from the earliest times, where they were in the form of hoes, knives, bridges or bells; eventually only the end of the knife-handle, a round disc with a square hole, was substituted for the clumsier objects, and this piece—called a cash—was cast until quite modern times. Japan, too, from about the end of the sixteenth century produced cast coins; these are in the form of large oval gold plates called obans, with devices stamped on them as guarantees, and with the Emperor's signature in indian ink. Owing to this latter fact they were held in considerable reverence and wrapped in silk so as to preserve the signature.

Coin shapes

Although the earliest Greek coins were somewhat irregular in shape, they still were approximately round, and both Greeks and Romans seem to have judged that a coin should be round, a belief which has never been seriously disputed—as witness our present-day coinage. There were some exceptions to this; the fish-shaped coins of Olbia for instance, as also the early Roman bars or *Æs signatum*. Later, however, the successors of Alexander the Great in N.W. India adopted square coins for some of their

bronze issues, a practice still followed as regards some of the nickel coins of India. Round coins with square holes in the middle are common to China, Japan and Korea, whilst modern French, Belgian and British East and West Africa have issued nickel coins with central holes, so that the natives could string them. Square or lozenge-shaped coins were struck both in England and in Northern Europe during sieges, a fact which can be explained by the absence of a regular mint, as also because these emergency pieces were often struck from melted-down church or college plate. The sieges of Newark, Colchester and Scarborough in Charles I's reign are such examples; there are many more—all of the sixteenth and seventeenth centuries—in the Dutch, German and Swedish series. In Sweden, too, we find large copper plates issued as emergency money in the eighteenth century; these had round stamps punched in the four corners and the centre, denoting value and reign. Otherwise coins were round and have remained so ever since.

Metals

The three metals most commonly used are gold, silver and copper. Of these silver is the most important, and copper rates second to it, because one or other of these two metals has been the standard on which most currencies have been based. Gold was usually a multiple of silver, and only used for large payments or for savings. In Greek times silver was the normal standard, and in Rome the early copper coinage was soon displaced by a silver unit, as this was found more convenient for trade. Iron was sometimes used but nearly always for emergency issues. Coins of lead do occur, particularly in Egypt about the third century A.D. Tin coins circulated in Britain and Northern Gaul about the first century A.D.; tin issues are also to be found in the Malayan issue of modern times. English issues of minor coins from Charles II to William and Mary were in tin. Russia experimented with a

THE MAKING OF COINS

platinum coinage in the nineteenth century, but this was soon abandoned as economically unsatisfactory. But in the main, gold, silver and copper are the usual metals, although cupro-nickel, aluminium-bronze and nickel are now extensively used for minor denominations.

Chapter 2

WHAT COINS TO COLLECT

HERE we embark on a difficult subject, for there are scores of ways in which to collect coins, and a great deal depends on individual preferences. All that can be done is to suggest some of the ways in which coins have been, or can be, collected: the final choice is yours.

There are some main groupings into which the subject can be divided, as follows:

HISTORICAL

Coins of one country

This is perhaps the most obvious way to collect, and hardly needs elaboration.

Coins of two or more countries, closely allied

Typical examples would be the Anglo-Gallic coinage of Edward III to Henry VI for the English possessions in France, as well as the contemporaneous issues in England; the Anglo-Hanoverian coinage of George I to William IV for Brunswick and Luneburg, and later for Hanover, together with their English counterparts; the republic of Central America (Costa Rica, Guatemala, Honduras, Nicaragua and Salvador); Spain and the Two Sicilies; the Spanish, followed by the Austrian, domination of the Netherlands, and many more.

Coins of one period of history

This is a very interesting pursuit, and it has often been favoured. Dr. L. A. Lawrence concentrated on the gold noble of Edward III, and by the end of his life he had a wonderful collection, which happily has passed in its entirety into the hands of another enthusiast. H. M. Lingford's splendid collection of the coinage of James I came under the hammer in 1951 and the catalogue is most useful for reference. In the same category would come a collection of coins issued as a result of the Crusades, including those ephemeral states such as the Kingdom of Jerusalem, the Principality of Achaia, the Dukedom of Taranto and the Signory of Neopatras. Then the coins of the Tetrarchy—those four co-Emperors Diocletian, Maximian Herculeus, Constantius Chlorus and Galerius Masimian—are another illustration of this same method of concentrating on one period. This need not be restricted to one country, nor to ancient coins. Prince Farouk of Egypt, whose collection was recently sold by auction, specialised in the nineteenth and twentieth centuries, and it is true to say that he formed the largest and most representative collection of this period, including innumerable patterns and proofs, coins struck out of their normal metal, and even bank-notes. Then the issues of Napoleon and his family, covering the period from 1802 to 1815, are of absorbing interest and lead to a better understanding of his impact on European history.

Coins of an overlord and his feudatory states

The example which immediately springs to mind is the Holy Roman Empire. Founded by Charlemagne in A.D. 800 it was not an empire in the modern sense, as that prince cannot be said to have exercised more than a suzerainty over a great part of the dominions which, at least in title, were included within his empire. A numerous body of autonomous states under the sanction of the Emperor soon enjoyed the right of striking money, and a collection of these coins, covering a large part of Germany,

the Netherlands, France and Italy, showing the name of the city or ruler in conjunction with the name and title of the superior lord, is likely to be highly rewarding, particularly as it will lead to some understanding of the political and economic situation in all that part of Western Europe.

Coins issued by ecclesiastical rulers

The largest series is, of course, that issued by the Popes beginning with Hadrian I (A.D. 772-95), and except for the hiatus between Pius IX (1870) and Pius XI (1929) continuing until the present day. Needless to say, as the period covered is so long, the series is very extensive and it would need a very long purse to make as complete a collection as possible. However, as with any other series, it can be divided into periods, or the collection confined to certain denominations. For anyone interested in Christian legends, this is a very rich field; there are also many interesting types representing basilicas, churches and other buildings in Rome, particularly in the seventeenth and eighteenth centuries.

Apart from these, there are many other ecclesiastical rulers who had the right to coin. The Archbishops of Canterbury from Jaenberht (766-91) to Plegmund (890-914) struck pennies; there are long series struck by the Archbishops of Bremen, Cologne, Magdeburg, Mainz, Olmütz, Prague, Salzburg, Treves and Vienna; the Bishops of Augsburg, Bamberg, Basel, Breslau, Brixen, Camin, Coire, Constance, Eichstatt, Freising, Fulda, Gurk, Halberstadt, Hildesheim, Laibach, Lausanne, Lübeck, Liège, Metz, Münster, Osnabrück, Paderborn, Passau, Ratisbon, Ratzeburg, Sion, Spire, Strasburg and Würzburg; and even certain abbeys such as Beromünster near Lucerne, Corvey, Elwangen, St. Gall, Kempten, Murbach and Lüders, Stablo, Werden and Helmstadt, also Essen, Herford, Quedlinburg and Thoren, and still the list is not exhausted.

Coins of one particular ruler

Here the choice is infinite. One collector whose Christian name is Alexander made a special point in collecting the coins of Alexander the Great, and because his father's name was Hadrian, he favoured that Emperor with more attention than all the others. Specialised collections have been made of the coins of William the Conqueror, of Stephen, of James I, of Charles I, and many another English ruler; others have concentrated on Peter the Great of Russia, on Simon Bolivar whose bust appears on many South American coins, on Louis XIV of France, on Napoleon, and several other interesting sovereigns.

Emergency coins struck during sieges

This is a very interesting series, and fuller details will be found in Chapter 10 under the sub-heading "Siege coins."

Coins issued by revolutionaries

To a certain extent this is a small group, but it can be fascinating. I would include the coins issued during the troublous reign of Stephen by Eustace Fitzjohn, Robert de Stuteville, Henry of Blois, Bishop of Winchester, the Empress Matilda, Robert and William of Gloucester, though these are likely to be expensive. There is, too, the so-called pattern groat of Perkin Warbeck (1494), and the pattern 60-shilling pieces of James VIII, the Old Pretender.

In France the issues of Charles (X), Cardinal de Bourbon (1589-90), in Portugal the coins of the Prior do Crato, D. Antonio (1590), in Spain the coins of Charles V (1833-40) and Charles VII (1872-85), in Hungary the coins of the Malcontents (1703-11), should all be included. Insurrections in Central and South America will provide some more material, for example the Mexican coinage of Morelos (1812-14), of Generals Villa and Zapata during the revolution of 1913-16, not omitting the Muera Huerta (Death to Huerta) peso of 1914 issued by the

Constitutional Army and carrying this dire threat against Victoriano Huerta who had been elected Provisional President. (Any soldier captured by Huerta's forces and found in possession of this coin was promptly put to death.)

In Chile there are the Copiapo peso of 1865, the Serena and Valparaiso pesos of 1822; also the Tarapasa peso of 1891 struck during the rebellion against President Balmaceda. In Peru the 8-reales of 1824 issued by the Spanish general, Canterac, should also be included. There are, of course, many others which could join this category.

Coins of women rulers

I have always thought that such a collection would be very pleasing and historically revealing. Apart from the names which come readily to mind, such as Cleopatra, Mary, Queen of Scots, Mary Tudor, Elizabeth I, Anne, Victoria, Catherine II of Russia, Christina of Sweden, Isabella of Spain, there are many more. There is the long line of Roman Empresses, followed by the Byzantine consorts, as well as rulers in their own right, such as Irene (797-802) and Theodora (1055-6). In those European countries to which the Salic Law (debaring the female line from the succession) did not apply, we find quite a few: Ulrica Eleonora in Sweden, Catherine I and Anna in Russia, Isabella II in Spain, Marie de Nemours-Orleans in Neuchatel; Giovanna I of Naples, Christina of Lorraine in Florence, Maria Maddalena Malaspina in Fossdinovo, Marie Louise in Parma, Bona di Savoia in Milan—all in Italy; Henriette de Lorraine-Vaudemont in Phalsbourg and Lixheim, Jeanne d'Albret in Navarre, Jeanne de Naples in Provence—all in France; and a certain number in Germany, including Christina Charlotte of Brandenburg, Hedwig Sophia of Hesse, Anna Amalia of Saxony, Margaretha of Arenberg, Catharina Belgica of Hanau, Maria of Jever, not forgetting Maria Theresa of Austria and Elizabeth Bocskai of Transylvania. Pride of place, for my part, would go to the lovely

portrait taler of Mary of Burgundy on her marriage to Maximilian of Austria in 1479 (Plate XVI, 1). Then I would like to include the pattern dollar of Liliuokalani of Hawaii, as well as a Chinese dollar of the Empress Tzu-Hsi, which may not be an official issue, but must nevertheless have been struck at the Tientsin mint.

Most of the ladies mentioned are represented by portrait coins, but there are many others with only coats of arms. There is also quite a large series of coins with joint rulers, such as William and Mary in the English series, and also of mothers acting as Regents for their sons, such as Joan the Mad with Charles V, none of which have been included above. There is therefore plenty of scope for the formation of a splendid feminine portrait gallery.

GEOGRAPHICAL

Coins of one area

Particularly in collecting Greek coins where the autonomous city-states were so numerous, a collection such as that formed by Sir Hermann Weber comprised many thousands of coins and is beyond the means of most collectors. It has therefore often been found better to restrict oneself to a certain area such as the Greek Islands, or Athens, or Sicily. One collector specialises in the issues of Asia Minor, another has chosen Palestinian coins; M. P. Vlasto collected the coins of Tarentum, J. Mavrogordato those of Chios, and G. Dattari those of Alexandria. The same system has also been applied to the issues of the many states in the Netherlands, Germany and Italy, choosing in the first case Flanders or Brabant or Tournai; in the second Bavaria, Cologne, Brandenburg, Mecklenburg or Mansfeld; in the third Milan, Mantua, Naples, Tuscany or Venice. Whenever a country at some period of its history was divided into many states, it may be easier to impose some such geographical limitation.

Coins illustrating economic relations

A very interesting collection was made several years ago by A. C. Headlam of Greek coins to illustrate the trade routes of the Mediterranean from the sixth to the fourth century B.C., but it was not completed owing to his becoming Bishop of Gloucester. This would be an attractive theme to pursue further. P. Grierson in his *Numismatics and History* suggests that "the value of the study of coinage to the economic historian might be provided by taking one of the late feudal coinages, that of the Friesacher Pfennig or the English sterling, for example, and tracing its influence in neighbouring areas, the Friesacher Pfennig in north-eastern Italy and Austria and Hungary, or the sterling in the Low Countries and Westphalia." For the historian to be able to do this, a collection has to be formed, both collector and historian collaborating to draw the necessary conclusions.

Colonial issues

Most European countries have had colonies, and these issues have always attracted attention. There is no need to enumerate the British colonies since they are well known and numerous. But do not overlook the French, Danish, Swedish, Spanish and Portuguese colonies, and in modern times the German and Italian colonial issues.

Local issues

To anyone interested in English county history a collection of Anglo-Saxon and Norman pennies of one or several counties is of very great interest. In Kent, my native county, there were mints at Canterbury, Dartford, Dover, Hythe, Lymne, Rochester, Romney and Sandwich; every other county can provide several mints too. To these can be added the seventeenth-century tokens, about which some details will be found in Chapter 9.

The same system can also be applied to French feudal issues, to

the German and Italian mediæval issues, and to many other similar series.

Coins with views of towns

A delightful collection can be made by concentrating on the picturesque views of towns and cities which are to be found, in the main, on German Talers. The very rare crown of Charles I of 1644 with a view of Oxford is the only English coin which fits into this category, and the chances of obtaining one are slender. However, here are some of the foreign towns which issued coins with views: Augsburg 1626-72, Bamberg 1800, Breslau 1633, Colmar 1670, Cologne 1705, Constance 1623, Eisenach 1756, Frankfurt a/M. 1772 and 1796, Hamburg 1665, Mannheim 1763-7, Memmingen 1623, Munich 1640, Münster 1638 and 1648, Nuremberg 1633, Ravensburg 1624, Ratisbon 1633, Saalfeld 1720 and Ulm 1622—all in Germany; Basel, Zug and Zürich in Switzerland; Danzig and Thorn in Poland; Calmar in Sweden; Groningen in Holland; and these do not exhaust the list.

ARTISTIC

Sicilian and other Greek coins signed by artists

At the close of the fifth century B.C. the artistic development of the coinage of Syracuse, as indeed of other Sicilian city-states and of some in Greece proper, reached its highest peak, and so proud were the artists of their gems that they signed many of them. The names of Kimon and Euainetos are well known because of the large dekadrachms (or 50-litra pieces) which they signed, and they still are some of the loveliest coins ever struck. But there were other artists, and in *Notes sur les signatures de graveurs sur les monnaies grecques*, published in 1906, my father gathered together an astounding number, most of whose coins he illustrated, and to anyone interested I can recommend this work, although a few of his conclusions may have to be modified. G. Locker Lampson

made a collection of the finest artistic Greek coins he could find, and the plates to the catalogue by E. S. G. Robinson are a joy to look through. Unfortunately these signed coins are expensive, but there are others, particularly the smaller coins of the hemidrachm or diobol size, which are equally delightful and more modest in price. In any study of art the Greek coinage cannot be left out.

Roman bronze sestertii of the first and second centuries A.D.

Although far from possessing the beauty of the Greek coinage, these large bronze coins with such bold portraits of the early Emperors have their own particular charm, and some of the reverses are full of life and spirit. Besides, the metal so often takes a beautiful patina, dark green, olive green, chocolate brown, black and several gradations between, and this coloration is highly prized by collectors.

Coins of the Renaissance

Simultaneously with the beautiful cast medals which the Renaissance called into being, the coinage, particularly of some Italian and German states, reflected the rebirth of artistic taste. In Ferrara the lovely testoon of Ercole d'Este with the Duke on horseback in classical dress receives its inspiration partly from Roman sources, with the added beauty of the Renaissance ideal. In the same category can be classed the testoons of Alfonso II d'Este, also for Ferrara, Cosimo I de' Medici for Florence, those of Galeazzo Maria Sforza, his son Gian Galeazzo, and the latter's uncle Lodovico il Moro for Milan; Louis XII of France for Milan; Charles V for Milan, by the celebrated artist Leone Leoni; the gold double sequin of Giovanni Bentivoglio for Antignate; the testoons of Louis, Duke of Orleans, for Asti; those of Ludovico II di Saluzzo for Carmagnola; the gold and silver coins of Gianfrancesco Pico of Mirandola. All these, and many others, were issued in the last quarter of the fifteenth century and the

first quarter of the sixteenth century. A collection of them provides a very real cross-section of the artistic feeling of the period. A worthy counterpart is to be found in the shilling of Henry VII (of England) which seems to owe a good deal to the influence of the contemporary Italian coinage.

In Germany and Austria, too, there are some notable Talers of the same period, equally deserving of attention. The marriage Taler of Maximilian of Austria and Mary of Burgundy (Plate XVI, 1) is a lovely coin; it was also by an Italian artist, Gian Marco Cavalli, after a medal by Candida. I would include the Taler of Sigismund of Austria for the Tyrol, 1486, the Berne Taler of 1494, the Talers of Ferdinand I of Austria of 1522 and 1528, the Ursula Taler of Cologne, 1564 (Plate XVI, 2), and the Zürich Taler of 1512, amongst many others.

MISCELLANEOUS

Animals on coins

Here is a vast field in which a tremendous number of animals are represented. In the Greek issues the choice is infinite, and I can only name but a few: ass (Mende), bee (Ephesus), boar (Methymna), bull (Thurium), cock (Himera), cow and calf (Dyrrhachium), crab (Agrigentum), dog (Segesta), dove (Sicyon), eagle (Agrigentum), elephant (Seleucus I of Syria), frog (Seriphos), goat (Ænus), hare (Messana), lion (Carthage), owl (Athens), swan (Clazomenae), turtle (Ægina).

Horses there are in plenty, either alone, standing, running, jumping, or a pair drawing a chariot, or four being driven victoriously in the Games. Dolphins also appear on many coins, notably those of Tarentum and Syracuse, whilst the electrum coinage of Cyzicus provides us with the tunny-fish as adjunct to the main type amongst which are to be found crab, lion, bull, boar, ram, dog, eagle and dolphin, as well as some fabulous creatures such as the Sphinx, Pegasus, Chimæra and others. Parts

of animals are also represented on coins, such as a lion's head, goat's head, bull's head facing, lion's mask, etc.

On Roman coins, too, all sorts of animals are depicted, and the subject is interestingly treated in GNECCHI: *The Fauna and Flora of Ancient Rome*, which I translated from the Italian. Suffice it to say that all the conventional animals are represented, together with the less common, such as the butterfly, the crocodile, the jackdaw, the panther, the peacock, the rat, the raven, the rhinoceros, serpents, the tortoise, the wolf and the wren, to name but a few.

On European coins later than the mediæval series there is quite a selection to be gathered: bear in Anhalt, Bern, Basel and St. Gall, hen in Saxony (Henneberg-Ilmenau), lion in Venice, stag in Stolberg, lamb in Nuremberg, hedgehog in Milan and France, falcon in Brandenburg, dolphin in the Dauphiné, wolf at Brisach and Piacenza, swan in Brunswick, dog in Mantua, and quite a few more.

On modern coins there are plenty to choose, beginning with the coins of Eire with horse, sow, hare, hen, salmon, bull, dog and woodcock, the bird of Paradise from German New Guinea, the lion from East Africa, the kangaroo and cassowary from Australia, the wren on our own farthing, the springbok from South Africa, the bison on the U.S.A. 5-cents, the quetzal from Guatemala, the condor from Chile, the eagle and serpent from Mexico, the elephant from Ceylon and Siberia, oxen from Albania, the caribou and beaver from Canada, the owl from Greece, the llama from Peru, the turtle from Fiji, the dove from Griqualand, the badger from Sarawak, the peacock from Burma, and the antelope from Southern Rhodesia.

Plants on coins

This can also be an interesting way to form a collection, though there is less material to obtain. In the Greek series there is the wheat-ear of Metapontum, the silphium plant of Cyrene, a selinon (wild celery) leaf at Selinus, a sprig of olive at Athens, a

vine at Mende, a rose at Rhodes, a palm-tree at Carthage and several other cities; there are also many coins with oak wreaths or laurel wreaths on the reverse. For Roman coins I would again refer you to the *Fauna and Flora on Roman Coins*. As to modern coins, there is the sunflower in Mantua, the rose-tree in Florence, the thrift on our threepence of George VI, the thistle on many Scottish coins, the Tudor rose, oak-leaf and acorns on the sixpence and threepence of George V, olive branch, wheat-ear, orange and grapes on Italian coins, and fern-leaf in New Zealand with which to start.

I

Coins with two or more portraits

Another interesting approach for the collector. In the English series we have three such pieces: Stephen and Matilda, Philip of Spain and Mary, and William and Mary. In Greek times there are only few, as the practice of putting the ruler's portrait on coins did not begin until about 300 B.C., but there is Ptolemy II of Egypt with Arsinoe II (285-246 B.C.), and Cleopatra with Antiochus VIII of Syria (125-121 B.C.). In Roman times there are a few more: Claudius and Agrippina, Nero and Agrippina, Nero and Octavia, Titus and Domitian, for example, though the more usual practice was to have one head each side, such as Augustus and Tiberius, or Septimius Severus and Julia Domna.

In the Byzantine series, however, joint rulers are the rule rather than the exception, beginning with Heraclius (A.D. 610-41), as the Emperor usually associated his son as co-ruler with him. However, unless Byzantine art, which is rather flat, appeals to you it is a series you can easily omit. In Europe there are a great many such coins, especially in the German series, and in one case—a Taler of Saxe-Weimar, about 1605-20—the coin shows all eight brothers standing side by side, whilst another shows four on each side. In the Netherlands the ducatoons of Albert and Isabella for Brabant come into this category, and in France the Feudal issues provide some interesting examples. Italy has a number,

particularly of rulers during their minority with their mothers, such as Charles Emmanuel II of Savoy and his mother, Maria Christina, Charles Louis of Tuscany with his mother, Marie Louise, but others with joint rulers like Elisa Bonaparte and Felix Baciocchi of Lucca. In more modern times we can select Peter I and Kara George of Serbia, Nicholas II and Michael Romanoff of Russia, Leopold I and II of Belgium, and Michael II, Ferdinand and Michael the Brave in Roumania.

Coins of unusual shapes and primitive currencies

Further details will be found in Chapter 10, and some are illustrated on Plate XII.

Coins with unusual legends

This method of collecting needs some knowledge of Latin, as, with the exception of the Greek and Roman colonial issues, the great majority of coins before the nineteenth century have Latin legends. Legends can be divided into two categories: those with a Christian connotation, and those purely secular. A useful survey of the former exists in ALLAN and ZIMMERMAN: *Christian Teaching of Coin Mottoes*, and I would refer any collector interested to that book. For the others I have in mind the Scottish NEMO ME IMPUNE LACESSIT (No one shall hurt me with impunity), and Henry VIII's ROSA SINE SPINA (A rose without a thorn); the Brunswick GOTTES FREVNDT DER PFAFFEN FEINDT (God's friend is the priests' enemy); Mussolini's boast on the Italian 20-lire of 1928, MEGLIO VIVERE UN GIORNO DA LEONE CHE CENTO ANNI DA PECORA (Better to live one day as a lion than a hundred years as a sheep); Pope Clement XI's FGENUS PECVNIAE FVNVS EST ANIMAE (The lending of money is the funeral of the soul); MUERA HUERTA (Death to Huerta) on a Mexican peso of 1916, as typical examples. Too little attention has so far been devoted to these unusual inscriptions, and there is therefore ample scope for research.

It is obviously impossible to suggest all the various combinations which can be worked out, but any one, or more, of the above groups will provide endless enjoyment and repay careful study. One collector specialised in the coins of any ruler who had met an untimely end; another, a well-known violinist, collected coins of those countries in which he had played; yet another specialised in coins issued by his ancestors. So do not be afraid of striking out on a line of your own—coins are there to be enjoyed and to yield their secrets.

WHY COLLECT COINS?

Why indeed, if not for enjoyment? It is of no use to start a collection unless coins make a certain appeal to you. Think for a moment of the wealth of history covered by the coinage. It is possible, for instance, to own a denarius of Tiberius circulating in the time of our Lord, possibly the very coin which prompted this question: "Whose image and superscription is this?" Or a penny of William the Conqueror, the last invader to defeat us in battle. Or what were the hopes and fears of the citizen of Newark in 1645 as he used his lozenge-shaped shilling? Where else will you see the freshness of youth and beauty of Mary of Burgundy on her marriage to Maximilian of Austria in 1479 at the age of twenty-one, except on the Taler issued then? She looks much older on her tomb in Bruges Cathedral. Who was the beautiful Syracusan maiden whom Kimon chose as his model for the famous dekadrachm given as a prize at the Assinarian Games? We shall never know, but her proud, disdainful look is immortalised on his masterpiece. And there are so many more. Unless coins are regarded in a sense as crystallised history, or cherished for their artistic merit, there is little sense in laying them side by side.

It may be superfluous to add here that a certain amount of historical background is essential to the true knowledge and enjoyment of coins. It is therefore necessary not only to know all about one's coins, to study die sequences, mint marks, shape of

lettering, and the like; they must be set against the backcloth of their times, so that both history and the coins are illumined. Unfortunately, there has been too little correlation between history and numismatics in the past; both subjects can only gain from a closer link between them.

HOW TO START

A recent booklet suggested that the best way to start was to collect "in a jackdaw" fashion; that is, to collect anything and everything that you fancy. I do not agree; it does happen to be a stage through which many collectors pass, but is there any need? The upshot usually is that after a time all this junk has to be discarded and a new start made, so why not cut it out? Since there are so many ways in which to collect, let us take a simple example and see where it leads us.

The 1954 shilling is already in circulation and usually in very fine state, so let us start with that. Is it the English shilling (with the leopards) or the Scottish one with lion rampant? So we need both. Then did you know that the 1954 issues differ from the 1953 ones in the Queen's title: OMN: BRITT: is omitted in 1954, so you need both English and Scottish shillings of 1953. With those four coins your collection of Elizabeth II shillings is complete. Next add the shillings of George VI; you will need six, because the issues 1937-46 were in 50 per cent. silver, whilst the later issues are in cupro-nickel, and there are both English and Scottish shillings in both metals. In addition the issues from 1949 omit IND:IMP. Ten shillings and two reigns complete! Then comes George V, with three different metals and two different heads, but no different issue for England and Scotland—four coins again. Edward VII only had one type of shilling, so to have all the different issues of shillings, 1902 to 1954, you require fifteen coins, covering four reigns and fifty years.

Still going back, there are four issues of Victoria, one of William IV and three of George IV, making a total of twenty-

WHAT COINS TO COLLECT

three shillings covering seven reigns and 130 years of English history. There is no need to elaborate this example further, but from this beginning several ways of branching out suggest themselves. You can go right back to the first shilling, the testoon of Henry VII; you can add the sixpences or the half-crowns, the florins or the crowns; you can add the Maundy coins, or the copper and bronze issues. If the best preserved coin you can obtain is always selected, you will have a very pleasant collection of coins, the study of which will teach you a good deal, not only about the coins themselves, but also concerning the history which lies behind them. Very soon you will need some books, partly to learn what coins in your particular series exist, partly to understand more about the coins themselves. The books appended to this chapter will help you; for others consult the Bibliography.

If, however, your inclination leads you to prefer Greek or Roman coins, American or European coins, for instance, it would be best to obtain a book on the subject in order to plan the collection intelligently, but if you have a good historical background of the particular country or period selected, this may not be necessary. The essential art of collecting is to exercise a choice at all times; to choose the coin in the best condition; to choose a series and build it up; to choose artistic pieces that please you; to choose those pieces that illustrate your historical knowledge. Your collection then will be a source of satisfaction to you, and always of interest to those privileged to see it.

SOME RECOMMENDED BOOKS

ON COLLECTING

- MILNE, SUTHERLAND and THOMPSON.—*Coin Collecting*. London, 1950.
CHAMBERLAIN, C. C.—*Collecting Coins*. London, n.d.
RAWLINGS, G.—*Coins and How to Know them*. 5th ed. London, 1935.
BURGESS.—*Chats on Old Coins*. London, 1913.

THE ART OF COLLECTING COINS

ENGLISH

- BROOKE, G. C.—*English Coins*. London, 1932.
OMAN, Sir Charles.—*The Coinage of England*. Oxford, 1931.
SEABY, H. A.—*The English Silver Coinage, 1649-1949*. London, 1949.
BRAHAH, E.—*English Regal Copper Coins*. London, 1929.

GREEK

- MILNE, J. G.—*Greek Coinage*. Oxford, 1931.
SELTMAN, C.—*Masterpieces of Greek Coinage*. London, 1949.
SELTMAN, C.—*A Book of Greek Coins*—a King Penguin. London, 1952.

ROMAN

- MATTINGLY, H.—*Roman Coins*. London, 1928.
MILNE, J. G.—*Greek and Roman Coins, and the Study of History*.
London, 1939.
GNECCHI, F. (translated by Rev. A. W. Hands)—*Roman Coins*.
London, 1903.

GENERAL

- RAYMOND, W.—*Coins of the World—Nineteenth-century Issue*. 2nd ed.
New York, 1953.
RAYMOND, W.—*Coins of the World—Twentieth-century Issues, 1901-50*.
New York, 1953.

EUROPEAN

- DAVENPORT—*European Crowns since 1800*. Buffalo, 1947.
DAVENPORT—*German Talers since 1800*. Galesburg, 1949.
HAZLITT, W. C.—*The Coinage of the European Continent*. London,
1893.

Chapter 3

TECHNICALITIES

AS soon as you consult a numismatic book, you will need to know some, at least, of the technical terms used. A short list of these, with their meanings, is given here: a fuller list will be found in the Appendix.

<i>Term</i>	<i>Meaning</i>
Obverse	The main or face side.
Reverse	The tail side.
AV, AR, AE	Gold, silver, copper (or bronze).
Flan (Amer. planchet)	The blank piece of metal on which the piece is struck.
Field	The flat surface surrounding the design.
Hammered	The old method of striking coins by hand.
Milling	The ribbing on the edge.
Mill or Milled	(As opposed to hammered.) Struck with a screw-press.
Legend	The inscription.
Arms	Shield or coat of arms.
Type	The general design.
Mint	The place of issue.
Mint mark or initial mark	A symbol or letter indicating the mint or the date.
Monogram	Two or more letters interwoven.
Moneyer	The official responsible for the issue.

THE ART OF COLLECTING COINS

<i>Term</i>	<i>Meaning</i>
Symbol	A distinguishing mark, usually in the field.
Condition	The state of preservation.
Pattern	A trial piece.
Proof	A coin struck with polished dies, imparting a mirror-like finish.

The states of preservation are usually described as follows:

<i>Term</i>	<i>Meaning</i>
Fleur de Coin (F.D.C.)	} In the original condition, as issued.
Mint state, Uncirculated (Unc.)	
Extremely Fine (E.F.)	Showing very little wear.
Very Fine (V.F.)	Showing some wear, but fully legible.
Fine (F.)	Somewhat worn, not all clear.
Fair, Very Good (V.G.)	Much worn, type still discernible.

Other descriptions, such as Worn, Poor, Pierced, Scratched, are self-explanatory. The term "polished" is used when a coin has been cleaned with abrasive, and has thus acquired an unnatural shine. "Patina," usually on ancient bronze coins, is a coloration, often of great beauty, due to the action of water or minerals when such coins were buried.

WEIGHTS AND MEASURES

Since the origin of coinage, as we have seen, was based on the idea of a piece of metal of definite weight guaranteed by the device stamped on it, the Greeks attached great importance to accuracy of weight, and it is astonishing to find that, apart from wear, Greek coins vary from the standard weight by only fractions of a grain! One of the best immediate tests of whether a Greek coin is genuine or not is to check its weight; if it is more than a few grains light (owing to wear), or if it is too heavy, the chances are that the piece is a forgery. It is also sometimes necessary to weigh a small coin—for instance, in the English mediæval series—to determine to which issue it belongs.

TECHNICALITIES

Chemist's scales are the best type to use. The ordinary letter scale—and certainly the household scales—will hardly be delicate enough. Two systems of weights are in use side by side: the English troy weights based on the grain, and the metric system based on the gram. (Neither the avoirdupois nor the chemist's scruples are used.)

The following table of equivalents may prove useful:—

1 grain	= 0.065 grams.
24 grains (1 dwt.)	= 1.554 grams.
20 dwt. (1 oz. troy)	= 31.103 grams.
1 gram	= 15.43 grains = 0.032 oz. troy.
3.5 grams	= 54.01 grains = 0.112 oz. troy.
5 grams	= 77.16 grains = 0.160 oz. troy.

To convert avoirdupois weights into troy weights, should you be confronted with this problem, reduce to grains, remembering that 1 lb. avoirdupois = $437\frac{1}{2}$ grains, and 1 lb. troy = 480 grains.

The size of a coin or medal is now generally given in millimetres (mm.), although some older books, chiefly on medals, still use inches. It hardly seems necessary, therefore, to give a table of equivalents except to remind you that 1 inch = 25.4 mm.

FINENESS

Fineness is the amount of pure gold, silver or platinum contained in a coin as compared with an alloy of baser metal used in its composition. Owing to the softness of pure gold and to a lesser degree, pure silver, the practice of alloying these precious metals with a harder one has long been in use. Fineness is expressed in thousandths, the pure metal being 1,000. A sovereign is therefore described as being 916.6 fine, that is, its pure gold content is $916.6/1,000$ and the alloy (which may be silver or copper) is $83.3/1,000$. A French 20-franc piece is 900 fine (900 parts of pure gold to 100 parts of alloy). Until fairly recently the fineness of English gold coins was described in terms of carats,

24 carat being pure gold. The unusual fineness of the English sovereign is due to the fact that it is the equivalent of 22 carats,

$$\text{i.e. } \frac{22}{24} \times 1,000 = 916\cdot6.$$

Ancient coins were usually of pure gold or pure silver, although analysis will show the admixture of very small proportions of natural alloy.

In European history the thirteenth century shows the birth of two coins which obtained universal acceptance—the Florentine florin, and the Venetian sequin; both coins were of fine gold, and the Austro-German ducat which soon followed was of the same nearly pure fineness. Even the modern Austrian ducat coinage was struck as late as 1915 in pure gold, but otherwise, from the seventeenth century onwards gold and silver coins were normally alloyed. Mediæval coins were usually struck in fine silver or gold, but after the end of the Thirty Years War in 1648 a general debasement occurred. In English history the issues of Henry VIII, as also of Edward VI, were debased in order to compete with the great number of inferior foreign pieces circulating in England, although a return to the original standards was made in 1551 with the last issue of Edward VI. It would take us too far if a detailed study, country by country, were made, but full information on the fineness of most modern coins and many earlier ones will be found in the work listed below.

TARDY.—*Les Monnaies d'or, d'argent et de platine internationales*. Paris, 1947.

Chapter 4

THE FORMATION AND CARE OF YOUR COLLECTION

JUST as spring-cleaning is an annual event, so it is equally necessary from time to time to sort one's collection, partly to keep it in bounds, partly to throw out what is not worth keeping. Let us imagine that your collection has been amassed over a period, sometimes quite actively, at other times with long gaps and few additions. The inevitable result will be that it needs sorting. The following suggestions may be of help. First turn the lot out, so that you can see all your wealth at a glance. Then sort into countries; place the coins of each country in chronological order; write a ticket or an envelope for each one with at least the following details: Country, ruler, dates of reign, metal, denomination, date of coin, reference to standard work, condition and value. For example:

England
EDWARD VI
(1547-53)
AR Crown 1551
Broke Pl. XXXIX. 10
E.F. £8.

This will have the advantage of making it clear what you have and what you lack, details of which might be entered in a notebook for quick reference. If, as often happens, there are some

coins which you are unable to identify, do not hesitate to consult any museum with a coin collection, or a dealer, or the secretary of a local numismatic society, all of whom will be only too ready to help you.

Many coins are usually not too difficult to identify from the legends, and even if your Latin is sketchy it need not prove a handicap. Apart from Greek coins, which present a different problem since most of the legends (in Greek) are abbreviated, Latin is the usual language for most coins until the seventeenth century. On the head side of the coin the name of the ruler is usually quickly deciphered, and the rest follows more or less easily, even if all the abbreviations are not immediately clear.

Let us take two or three examples:

IACOBVS, D: G: MAG: BRI: FRA: ET HIB: REX.

The full legend with its translation is:

IACOBVS	Dei	Gratia	MAGnæ	BRItanniæ	FRAnciæ	ET
James	of God	by the grace	of Great	Britain	of France	and
			HIBerniæ	REX		
			of Ireland	King		

that is, James, by the Grace of God, King of Great Britain, France and Ireland.

It is therefore a coin of James I, as James II would have the numeral II added.

Similarly:

IMP L AUREL COMMO DVS AVG GERM SARM				
IMPerator	Lucius	AURELIus	COMMODOUS	AVGustus
Emperor	Lucius	Aurelius	Commodus	Hallowed
		GERManicus	SARMaticus	
		of Germania (and)	Sarmathia	
		[Hailed victor over]Germany		

This reads clearly as it stands, and is a coin of the Emperor Commodus, whose first names were Lucius Aurelius.

THE FORMATION AND CARE OF YOUR COLLECTION

Further:

LEOPOLDVS. DEI. GRATIA. ROM. IMP. SE. AV. GER. HUN.
BOH. REX.

LEOPOLDVS DEI GRATIA ROManorum IMPerator
Leopold of God by the grace of the Romans Emperor

SEmp(er) AVgustus GERmaniae HVNgariae BOHemiae REX
Perpetual Sovereign of Germany of Hungary of Bohemia King

that is, Leopold, by the grace of God, Emperor and Perpetual Sovereign of the Romans, King of Germany, Hungary and Bohemia.

A word of explanation: by "the Romans" the Holy Roman Empire founded by Charlemagne is intended. This is sometimes rendered by the initials S.R.I. for *Sacri Romani Imperii*, or "of the Holy Roman Empire."

In some cases the titles are continued for lack of space on the reverse of the coin, such as in this case:

ARCHI. AVSTRIA. DVX. BVRGVNDIÆ. STYRIÆ E^c

or:

ARCHIDux AVSTRIÆ DVX BVRGVNDIÆ STYRIÆ
Archduke of Austria, Duke of Burgundy, Styria,
EtCetera.
etc.

With a little practice I feel sure that most legends will be read quite easily, and this will assist in identifying the coins.

The next problem is how to keep one's coins in order. There are a number of ways which vary from country to country. The easiest, though not in my opinion the best, is to keep the coins in envelopes, and house them in those convenient boxes called "pipe-boxes" (which can be obtained from good cardboard-box manufacturers) as they take 2 inch by 2 inch envelopes, a convenient size for most coins. The disadvantage of this method is that the coins cannot be seen or displayed without taking them out of the envelopes and laying them on a tray, a laborious job

if many are involved. And, after all, a collection needs to be seen to be enjoyed.

Coin cabinets which were usual in England are now exceedingly difficult and expensive to obtain, since none have been made for about forty years. A proper coin cabinet should have trays with varied sizes of holes, usually described as sixpenny, shilling, half-crown and crown sizes, each hole with a baize round on which the coin with its round ticket can rest. Such a cabinet is ideal when found; it allows the collection to be seen or displayed with the minimum of trouble, and the usual double doors with lock and key ensure adequate protection. One word of warning: do not use a cabinet of cedarwood, as the resin in this wood has the curious effect of lacquering copper coins, or oak, as this blackens silver through the action of tannic acid. The more usual woods are mahogany, walnut and rosewood. Attempts have been made to manufacture coin cabinets in plastic, but so far expense has been the obstacle.

Continental cabinets usually have square divisions instead of round holes, and are equally serviceable; besides they are somewhat easier to manufacture. Another system is to have plain drawers and fill them with square cardboard boxes (or even square metal lids turned upside down). The trouble usually is that a certain amount of space is wasted, since it is difficult to match the size of the boxes with the size of the tray, but a little ingenuity may overcome this.

Failing the above, it is always possible to make one's own trays. The following method is quite simple, given a sharp knife and sufficient patience. Take two sheets of stout cardboard cut to the same size. On one sheet trace with a pair of compasses the various holes required, then cut these out with a really sharp knife (such as the curved knife used for linoleum). All you now have to do is to stick the pierced sheet on the plain one, leave under weights until quite dry, and the result will be entirely satisfactory.

The same result can be obtained with two sheets of thin veneer, using a fretsaw to pierce the holes.

DEGREES OF RARITY

Most books, and especially catalogues, indicate the rarity of a coin, using such obvious terms as "not common, scarce, rare, very rare, of the utmost rarity" and the like. In some publications, however, an attempt has been made to establish a scale of rarity with abbreviations such as:

- N — Normal, neither scarce nor common.
- S — Scarce.
- R — Rare
- R² — Very rare.
- R³ — Extremely rare.
- R⁴ — Eleven to twenty examples known.
- R⁵ — Five to ten examples known.
- R⁶ — Three or four known.
- R⁷ — Only one or two known.

Since this scale is not uniformly adopted, it is apt to be misleading; Hutten-Czapski in his *Catalogue of Polish Coins and Medals*, for instance, uses a scale of eight rarities (R¹ to R⁸). It would seem simpler after the term "extremely rare" has been reached to give an indication of the number of pieces believed to be extant than to try to fit this information into a scale. However, each collector is free to establish his own system, and the above information is given so that if such a system is encountered, its meaning may be understood. There is a tendency sometimes to label any coin which is not very common as "Rare"; caution is advised in this connection, otherwise all your geese will be swans! A coin is rare when only a few examples are available, and it has been known for a rare coin to become common through finds. Two instances come to mind: the London penny of Alfred the Great, with his bust and the monogram of LONDINIUM on the reverse, was really rare until a find of them was made some

forty years ago when digging foundations for the new Bank of England buildings; the crown of William III dated 1700 was quite a rare coin until one of the London banks discovered that for many years it had carried forward at each stocktaking about £2,000 in bags of silver currency, and decided to look into this reserve. To their surprise they found nothing but bright new crowns of 1700, which, when they came on to the market, soon brought the value down.

A coin becomes rare through a variety of reasons. Sometimes a fashion sets in for certain coins and they tend to disappear completely from the market. Evelyn, writing in 1697, states that for some reason popular fancy fell on Otho as the rarity to be acquired by every collector, and a dupondius (second brass) of Otho was "not counted dear at the Rate of Forty Pounds Sterling." Similar coins, rare in themselves, have become rarer still through their popular appeal, such as the denarius of Mark Anthony and Cleopatra, the Taler of Maximilian and Mary on their wedding, the farthing of Queen Anne, and the American cent of 1794. There are other coins which are not really rare, but become so owing to the constant demand for them, such as the shekel of Simon Maccabæus, the Tribute penny of Tiberius, the Pillar dollars of South America, and in modern times, the New Zealand Waitangi crown of 1935.

But rarities normally arise either owing to a limited issue, occasionally due in ancient times to the brittleness of the dies, and in later times to a large reserve of the previous issue or date, or to some change in the Government, death of a ruler, revolution or disaster. In addition, when the weight or fineness of a coin is reduced, the heavier or finer coin tends to go into the melting-pot. Instances of the above are: the rarity of some dates of Maundy coins, due to enough of the previous year being available; the coinage of Edward V who only reigned for six weeks; the issues of Napoleon in 1815 before the Battle of Waterloo; the Muera Huerta (Death to Huerta) peso of Mexico of 1914; the coinage of

1666 of Charles II, owing to the Great Fire of London; and the 5-dollar piece of 1822, of which no less than 17,796 were struck, but as it weighed a few grains more than the later issues, was melted down for the slight premium involved.

There is another class of rarity to which attention must be called. A common coin in very fine condition may be really rare in mint condition. This is not difficult to understand, as the purpose of a coin is to circulate, and when it does—jingling in pockets, thrown into tills, counted at banks—it inevitably must show scratches or signs of wear. This is more particularly the case with earlier coins struck in fine or standard gold or silver. A coin therefore which may have been given as a christening present soon after it was struck, and carefully preserved, may easily be a rarity, since it does not normally appear in such fine state. It is therefore always desirable to choose the finest specimen of any coin available, since apart from its better appearance it is more likely to become rare, even if it is not rare at the time.

Sometimes quite modern coins are rare, and a typical example is the half-crown of Edward VII of 1905. This is due to two factors; the issue of 1902 was quite large, and as there still remained large reserves of Victorian silver in the banks, demands on the Royal Mint in 1903 to 1905 were very small, and the number struck much reduced. Owing to some freak of chance, practically the whole of the issue of half-crowns of 1905 was sent to the island of St. Helena. Although the coin circulated freely there, very few have left the island, and no one troubled to collect them, so that when they now appear in change they are always very worn and hardly worth a place in any collection. Another instance, although in this case the coin is not rare, is the threepence of 1949. It was thought at one time that this coin was a rarity and an enthusiastic collector paid his milkman 5s. for every one he brought him. The truth of the matter is that the bulk of the issue was sent to Northern Ireland, and as the distance

is not great, any number can be obtained there in ordinary change.

To sum up: coins in the finest condition, particularly of early periods, can nearly always be classed as rare; as regards others, some research is essential to find out whether there is any reason why a coin should be regarded as rare, and the fact that one has not seen many is not necessarily a good guide.

CONDITION OF COINS

It cannot be emphasised sufficiently that the condition of a coin is a very important factor, particularly as regards its value, about which more will be said in a later chapter. But surely a coin on which every detail of a king's hair, or of his armour, can be clearly seen is much more pleasing to the eye and attractive even to the layman than a great rarity which is worn and blurred. Since the collecting of coins is partly æsthetic and partly for historical reasons or the like, it stands to reason that the story the coin has to tell should not be marred by such wear as to be unintelligible. Of course there is a temptation "to fill a gap" with a poor coin, but in my view a gap is much to be preferred. Some collectors say that they prefer coins showing a certain amount of wear, as they have fulfilled their purpose by circulating. Be that as it may, the degree of wear you allow to your coins is for you to judge; in the long run, however, the eye will reject the worn and concentrate on the finer, and that really is the art of collecting.

As regards proofs—that is, coins specially struck with polished dies and carefully handled by the mint concerned—they are only worth keeping when in their original condition; a damaged or scratched proof is of little value and no longer represents what it was intended to show: a coin as perfectly struck as human ingenuity can make it. Proofs are a modern fashion and do not occur much before the middle of the nineteenth century. There are some earlier coins which, owing to the carefulness of their

striking, are sometimes described as proofs, as indeed they may be, but they do not show that high mirror-like finish of the true proof. Reference must also be made to a few matt (dull) proofs, due to a whim of the mint-master. Examples of these are the Coronation Set of Edward VII, 1902; the 100-lire of Victor Emmanuel III of Italy, 1923, commemorating the March on Rome; and the sixtieth anniversary of the reign of Francis Joseph I as king of Hungary commemorated on the 100-korona of 1907.

CLEANING COINS

This is a ticklish subject. It is my unfortunate lot to see many coins in the course of a year which have been ruined by cleaning, especially copper coins treated with "Brasso" to restore their original colour! A coin should only be cleaned if it is dirty—that is, if it has a coating of dirt and not of oxide. And never make the mistake of thinking that the original brightness of a coin can be restored by cleaning; in fact, a coin with some wear and slightly discoloured by the atmosphere often looks better (except perhaps under a magnifying glass) than when it has been cleaned. Coins often take a "tone," particularly silver and copper ones, and this is no detriment but can add to their attractiveness. Some gold coins, particularly English hammered ones, have a red-gold colour known as the "Devonshire" tone, which is delightful. They are supposed to have been in the collection of an earlier Duke of Devonshire, and to have acquired that tone in Devonshire from the red earth to be seen there. Do not remove it, as it is prized by collectors. Silver coins often darken through oxidisation, and the result is not unpleasing. Sometimes they acquire a steel-blue tone, due to chemicals in the air, and coins collected in Warrington often used to show this peculiarity. Copper coins can acquire the most beautiful green patina, in various shades, and are greatly sought after. So before deciding

to clean a coin, make sure that you will improve it and not ruin it.

Some simple cleaning suggestions are as follows:

(1) *Gold*: Use methylated spirit on cotton wool, and do not rub but gently "wash" it, drying it on cotton wool also.

(2) *Silver*: Use ordinary household ammonia also on cotton wool. This will dissolve the grease on which the dirt rests. All chemical preparations, such as plate powder, "Silvo," "Silver-Dip" and the like will spoil a coin.

(3) *Copper*: Nothing much can be done without harming the coin. But try brushing it with a fairly hard bristle brush (not nylon).

There is an electrolytic process for removing oxide from silver coins, but this should only be used by an expert. It is useful when dealing with a find where a mass of coins is largely stuck together due to local conditions of the soil.

Whilst on this subject, a collector once approached me with a view to selling some of his duplicate Greek coins, most of which were rare specimens. When they arrived, all of them were bright and polished, as if they had been recently made. He told me that his parlourmaid had instructions to clean them every month, as he liked his coins to look fresh and clean! Needless to say they were quite unsaleable.

Chapter 5

WHERE TO SEE COINS

ALTHOUGH modern books on coins are usually well illustrated, nothing can take the place of the originals themselves. The would-be collector should therefore take the opportunity whenever he can of seeing as many coins as possible, especially if he is specialising in one series or the other. Only thus can his eye become trained to appreciate the best, and only in this way can research on any particular point yield fruitful results. Apart from private collections to which access can usually be obtained through the courtesy of museum officials, or the recommendation of a coin dealer, public collections are the finest means of familiarising oneself with coins in all their beauty and infinite variety, and no opportunity should be missed of becoming acquainted with them. The following list of museums, where collections of coins are to be seen, though not exhaustive, should prove useful:

GREAT BRITAIN

- The British Museum, London.
- The Ashmolean Museum, Oxford.
- The Fitzwilliam Museum, Cambridge.
- The Royal Scottish Museum, Edinburgh.
- National Museum of Antiquities, Edinburgh.
- The Hunterian Museum, Glasgow.
- The Public Library and Museum, Salford.
- The Grosvenor Museum, Chester.

THE ART OF COLLECTING COINS

The Museum, Manchester.
The Museum, Bradford.
Trinity College, Dublin.

EUROPE

France.—Cabinet des Médailles, Bibliothèque Nationale, Paris.
Le Musée de la Monnaie, Paris.
Cabinet des Médailles, Lyon.
Belgium.—Cabinet des Médailles, Bibliothèque Royale, Brussels.
Holland.—The Royal Coin Cabinet, The Hague.
The Mint Museum, Utrecht.
Fonds Pilaer, Leiden. (Portuguese coins).
Denmark.—The Royal Danish Coin and Medal Collection,
National Museum, Copenhagen.
Norway.—The University Coin Cabinet, Oslo.
Sweden.—The Royal Coin Cabinet, State Historical Museum,
Stockholm.
The University Collection, Uppsala.
The Coin Cabinet, Goteborg.
Germany.—Hamburg Historical Museum, Hamburg.
Staatliche Münzsammlung, Munich.
Römisch-Germanisches Museum, Cologne.
Rheinisches Landes-Museum, Bonn.
Westfälisches Landes-Museum, Munster.
Badisches Landes-Museum, Karlsruhe.
Württembergisches Landes-Museum, Stuttgart.
Kestner Museum, Hannover.
Switzerland.—The Swiss National Museum, Zurich.
The Historical Museums at Geneva, Lausanne, Bern and Bâle.
Stadtbibliothek, Münzkabinett, Winterthur.
Rätisches Museum, Chur.
Spain.—Archæological Museum, Madrid.
The Mint Museum, Madrid.
Coin Cabinet, Barcelona.
Portugal.—The Mint, Lisbon.
Italy.—National Museum, Rome.
The Vatican Collection, Rome.
The Royal Coin Collection, Institute of Numismatics, Palazzo
Barberini, Rome.
The Municipal Collection, Palazzo dei Conservatori, Rome.

WHERE TO SEE COINS

- The National Museum, Naples.
- The National Museum, Syracuse.
- The National Museum, Palermo.
- Museo Bottacia, Padova.
- The Archæological Museum, Florence.
- The Archæological Museum, Bologna.
- The Coin Cabinet, Castello Sforzesco, Milan.
- The Municipal Museum, Palazzo Madama, Turin.
- The Correr Museum, Venice.
- The Archæological Museum of the University, Venice.
- Austria.—The Federal Coin Cabinet, Vienna.
- Kärntner Landesmuseum, Klagenfurt.
- Tiroler Landesmuseum, Innsbruck.
- Steirisches Landesmuseum, Graz.
- Czechoslovakia.—The National Museum, Prague.
- Bulgaria.—The Narodni Museum, Sofia.
- Yugoslavia.—The National Museum, Belgrade.
- The National Museum, Zagreb.
- The Archæological Museum, Ljubljana.
- Hungary.—The National Magyar Museum, Budapest.
- Roumania.—National Museum of Antiquities, Bucharest.
- Greece.—The National Coin Cabinet, Athens.
- Turkey.—The National Collection, Istanbul.
- Finland.—The National Museum, Helsinki.
- Poland.—The National Museum, Warsaw.
- U.S.S.R.—The Ermitage Museum, Leningrad.
- The Moscow Art Museum, Moscow.

ASIA

- Syria.—The National Museum, Damascus.
- Israel.—The National Bezalet Collection, Jerusalem.
- The University Museum, Jerusalem.
- Persia.—The National Collection, Teheran.
- Iraq.—The Museum, Baghdad.
- Afghanistan.—The Museum, Kabul.
- India.—The Prince of Wales Museum, Bombay.
- The Indian Museum, Calcutta.
- Pakistan.—The Panjab Museum, Lahore.
- China.—The National Collection, Nanking.
- The Museum, Peiping.

THE ART OF COLLECTING COINS

Japan.—The Imperial Museum, Tokyo.

The Mint Museum, Osaka.

The Kyoto Museum, Kyoto.

Malaya.—Selangor Museum, Kuala Lumpur.

AFRICA

Egypt.—The Egyptian Museum, Cairo.

The Archæological Museum, Alexandria.

South Africa.—The South African National Collection, Pretoria.

The Museum, Johannesburg.

AUSTRALIA

The University of Sydney, New South Wales.

The National Art Gallery, Adelaide, South Australia.

NORTH AMERICA

U.S.A.—The Museum of the American Numismatic Society, New York.

The Metropolitan Museum of Art, New York.

The Princeton Library, Princeton, New York.

The Smithsonian Institution, Washington, D.C.

The Dumbarton Oaks Collection, Washington, D.C.

The Museum of Fine Arts, Boston, Mass.

The Fogg Art Museum, Harvard University, Cambridge, Mass.

The Yale Collection, New Haven, Conn.

The Museum of the U.S. Mint, Philadelphia, Pa.

Canada.—The Royal Ontario Museum of Archeology, Toronto.

Mexico.—The National Museum, Mexico City, D.F.

SOUTH AMERICA

Argentine.—The National Historical Museum, Buenos Aires.

Brazil.—The National Museum, Rio de Janeiro.

Colombia.—The National Museum, Bogota.

Haiti.—The National Museum, Port-au-Prince.

Peru.—The National University Collection, Lima.

Uruguay.—The Historical Museum, Montevideo.

Venezuela.—The National Museum, Caracas.

In some museums coins are publicly displayed in show-cases; in others it is necessary to ask to view them. Generally speaking—except in countries behind the Iron Curtain, with which there is at present little contact—museum curators are only too happy to

show their collections, but sometimes a little persistence is necessary. The late Rev. E. A. Sydenham, who wrote several useful books on Roman coins, used to tell the following story in connection with a tour of some European museums undertaken in search of additional material on the coinage of Nero. He asked to see the Roman coins in a certain Italian museum, and was courteously informed that the curator was not there, and that no one else had the necessary authority to show them. He called several times, and was always met with the same excuse. Finally he informed the official in question that he was determined to see the coins and would call every day—for a year if need be—until he had seen them! The curator, who combined this post with a university chair, decided that the reverend gentleman, being an Englishman, would probably carry out his threat, and that he had better get it over. An appointment was made, and Mr. Sydenham was met by the curator, a porter with a massive bunch of keys, two civilians (who looked like detectives) and a civil guard in full uniform. This procession then moved through hall after hall, each door being locked after it, and finally reached the cabinets where the coins were housed. When these were unlocked, the dust on the coins was so thick that it was difficult to differentiate between the various Emperors, and this knot of onlookers made Mr. Sydenham quite nervous. However, he managed to find what he wanted and make the necessary notes. When the cabinets had been locked again, he turned to the curator, thanked him for his courtesy, but added a phrase wondering whether in view of his cloth it had been really necessary to supervise him so closely? To which the curator replied: "They were not watching *you*, they were watching *me*!"

Some numismatic societies have collections of their own: for instance, the American Numismatic Society in New York. Others hold auction sales of coins at which only members may bid, such as the Northern numismatic societies in Copenhagen, Oslo, Stockholm and Helsinki. But all of them at their meetings

arrange for exhibits of coins, usually on the subject of whatever paper is being read. It is therefore well worth joining a society, either a national or a local one, or both, in order again to see coins and also discuss them with other enthusiasts. A list of British societies can be obtained from The Secretary, British Association of Numismatic Societies, 40 Pine Vale Crescent, Moordown, Bournemouth. American ones are listed in the *Numismatist*, the organ of the American Numismatic Association (The Secretary, P.O. Box 2155, Wichita 1, Kansas, U.S.A.)—the largest numismatic society, in terms of membership, in the world. For other numismatic societies an enquiry to the curator of a museum in the country concerned will furnish you with the necessary information.

Chapter 6

THE DEVELOPMENT OF A COLLECTION

IF you have now decided on the general pattern of the collection you intend to form, and have rejected those pieces which do not fit in with the scheme, your next problem will be how to add to your existing nucleus. There are, of course, in every country a number of coin dealers who hold stocks from which you can select what you need according to the means at your disposal. A postcard to The Secretary, International Association of Professional Numismatists, Malzgasse 25, Basel (Switzerland), will bring you a list of the more important of these in many countries, both in Europe and overseas, and on visiting them you will find that they are genuinely interested in helping you—whether you can spend much or little—and are not as mercenary as you might imagine! I well remember a stranger coming to my desk, at a time when I was exceptionally busy, with a small (and quite unimportant) Dutch coin of the late eighteenth century. Feeling a little annoyed at having to interrupt my task I told him what the coin was, on which he informed me that the piece had been found in his garden and that he would present it to his son. This roused my ire, and I gave him a lecture on the stupidity of giving a coin of such little interest to a boy; the proper kind of coin for him would be one connected with the history he was reading, such as a penny of William the Conqueror,

a sixpence of Queen Elizabeth I, or one of the siege coins of Charles I—in fact, something to illustrate the period of history, and not a little foreign coin of no particular interest. Somewhat to my surprise he asked to be shown such coins, and eventually departed with a lovely specimen of the Edward III gold noble, the first English gold coin to be struck, showing the King in a contemporary ship, and of real historical interest as it commemorates the defeat of the French at the Battle of Sluys—the beginning of British supremacy at sea—as also the development of the wool trade with Flanders—the beginning of our export trade on an international scale. It was only then that I found out that my visitor was one of the premier Dukes of England, whose son in subsequent years became a keen collector! The point of this anecdote is that, even if a coin dealer is very busy, or perhaps a little annoyed, he still has a real interest in seeing that the collector is guided along the right lines.

It is with confidence, therefore, that I recommend visits to the coin dealers, who, owing to their knowledge and interest, will often prevent the collector from wasting his money, and will at all times answer questions and elucidate difficult specimens.

Apart from the recognised coin dealers, many shops dealing in antiques or bric-à-brac have coins as well, and “finds” have been made in such shops from time to time. But a word of caution is necessary: in most cases the owner knows little about coins, and is inclined to price them too high; in addition there is always the risk of some of these coins being forgeries, which through ignorance have not been detected.

This applies more particularly to Greek and Roman coins, and quite especially in Italy, Greece and Asia Minor. The seller does not pretend to know, and cannot be called to account. Recently a Maltese collector on his way through Rome purchased five beautiful Greek silver coins for £17 and brought them to me to see, congratulating himself on his fine purchase. They were beautifully made but all false. He therefore asked whether he

could not return them and get his money back. On enquiring as to whether he had been given a guarantee with the coins, I was told that when he asked if they were guaranteed to be genuine the seller (not a regular coin dealer) answered that he guaranteed that they were pure silver! In such a case, of course, there is no redress.

Since, however, the interest of collecting lies to a certain extent in the lure of the chase, it is worth while exploring the possibilities of these antique shops, always remembering that the lucky purchase may have to be counterbalanced with others not so fortunate.

Another method is by exchange with other collectors, since it is sometimes difficult to avoid amassing duplicates. This is a very individual kind of transaction, and no guiding lines can be usefully suggested.

Both in this country and abroad there are periodical auction sales of coins, and these are a fruitful source of new and interesting material; in addition, the prices realised are a good though not infallible guide to values. Most coin auction sales in England are held in London, and a subscription to the coin catalogues (with list of prices realised) issued by the following three firms is recommended:

Christie, Manson & Woods, 8 King Street, St. James, London,
S.W.1.

Glendining & Company Limited, 7 Blenheim Street, New
Bond Street, London, W.1.

Sotheby & Co., 34 and 35 New Bond Street, London, W.1.

Bidding at an auction sale can be either in person or by letter; in the latter case commissions are accepted both by the auctioneers or by regular coin dealers. Auctioneers make no charge for bidding on your behalf; coin dealers usually charge 5 per cent. but in addition will view the lots themselves and suggest valuations. It must be remembered that buying at auction is different from buying over the counter in this respect—that even if you have

made a mistake (e.g. bidding on the wrong lot, or misreading the description) you are bound to accept the lot and cannot repudiate the acquisition. Therefore be sure to check your bids carefully before sending them, so that you will not be disappointed afterwards.

Many auction sales take place abroad, and in most cases through regular coin dealers who are their own auctioneers. Catalogues can be obtained free of charge from them, and bids placed with them in accordance with the conditions of sale printed in the catalogues.

These do not vary greatly from country to country, except that at most auction sales abroad there is a sales tax, varying from 5 per cent. to 21½ per cent., which has to be paid on the price realised, irrespective of any commission for buying which the dealer may charge. This can be ascertained beforehand, and should be taken into account when fixing your limits.

Some auctioneers are prepared to accept unlimited bids, others are not and say so in their catalogues. An unlimited bid—a dangerous form of amusement—is as its name implies a bid for a certain lot at whatever it fetches, against all comers. The danger lies in two bidders, either in person or through others, being prepared to go to any length; in such cases anything may happen and usually the successful party pays too much, the issue having been decided by the one with the strongest nerves or the longest purse! At an auction sale in London some years ago, three American dealers each sent unlimited bids on certain American coins, and each was represented by a separate coin dealer at the auction, none of whom, of course, knew that the others also had unlimited bids. The result was that the coins in question realised for the fortunate owner about £750, or nearly ten times what they were worth! What the buyers said—and they had only themselves to blame—is not recorded, but they were obliged to accept the coins at the prices realised since their bids were “unlimited.”

From time to time coins are unearthed in the course of digging foundations, ploughing and the like. These hoards are subject to the law of treasure trove if the coins are of silver or gold, but not of copper (unless judged to be of national interest). After a coroner's inquest has been held to determine whether the hoard is treasure trove or not, the hoard passes, in this country, to the British Museum if treasure trove, and to the finder if not. The British Museum assesses the value of the hoard, decides whether any or all the specimens are required for the National Collection, and rewards the finder with the market value of what it retains, and returns the balance of the hoard to the finder. In this way the historical value of the hoard is preserved by recording it in its entirety, and the finder is rewarded; also, new and welcome additions are made to the coins available for the collector. Unfortunately not all hoards are disclosed to the authorities, and some lamentable losses to historical research, as well as of great treasures, have occurred. A typical case was the find at Beaurains, near Arras, in 1922, of a magnificent hoard of Roman gold coins, including several medallions, over 300 aurei, gold necklaces, and even an Imperial laurel-wreath encrusted with precious stones. Only nine medallions and about sixty aurei were recovered, the rest having been melted down by the workmen who found the treasure and fled with it to Belgium. It would appear that this hoard was part of the treasure chest of the Emperor Constantius Chlorus, about the time of his journey to England in A.D. 296, to suppress the insurrection of Allectus, as one of the medallions, fortunately preserved in the Arras Museum, depicts his entry into London.

Had the finders surrendered the hoard to the authorities, an amazing treasure would have been safeguarded, and they themselves would have received, as their share, far more than they obtained for the gold when melted down.

A question which is bound to arise is: "Where can a reliable guide to the value of individual coins be found?" Unfortunately

there is no one catalogue or list with an answer to this query, such, for instance, as exists for stamps. The subject is too vast to be encompassed in one or two volumes, and the task would be so great and lengthy that prices in the early volumes might be out of date by the time the final volumes were printed. There are, however, some series which have been so covered, and the following works, when used with some knowledge, are recommended:

RAYMOND, W.—*Coins of the World—nineteenth and twentieth-century issues*. 2 vols. Prices are in U.S. dollars, and are reliable for coins in extremely fine condition; for poorer coins the values given must be sharply scaled down.

RAYMOND, W.—*United States Coins*. 1954 ed. Prices in U.S. dollars; equally reliable under the same conditions.

YEOMAN, R. S.—*A Guide Book of United States Coins*. 7th ed. Prices in U.S. dollars; very reliable.

DAVENPORT, J. S.—*European Crowns since 1800 (excluding the German States)*. Valuations list in U.S. dollars; a comparative guide but rather on the low side.

DAVENPORT, J. S.—*German Talers since 1800*. Valuation list in U.S. dollars; a good guide for extremely fine specimens.

SEABY, H. A.—*Standard Catalogue of the Coins of Great Britain and Ireland*. 1954 ed. A very reliable guide provided attention is paid to the note on condition which is printed at several intervals throughout the book.

SEABY, H. A.—*Roman Silver Coins*. Conservative valuations and most useful for this series.

In addition, there are specialised books on Brazilian, Canadian, Chinese, Japanese, Portuguese and Swedish coins, all with valuations, which are noted in the Bibliography.

Generally speaking, condition (and not age) governs value. An indignant would-be seller, when told that his Roman coin was of very little value as it was so worn and battered, retorted: "And so would you be if you were as old as that." Unfortunately, that is not the point, and though fashions change in collecting as in everything else, the present trend is towards the finest examples

procurable. *Æ*sthetically this is justifiable, since an unworn coin reveals much more of its original beauty than a scratched or smooth piece; historically also, since the legends will be readable and complete. It is nearly true to say that a perfect, or near perfect, coin is never too dear whatever the price; it does not take long for the price to rise since such specimens are far from numerous. But, just as the value of extremely fine or perfect specimens shows a continuous upward curve, so poorer specimens tend to remain at the same level, or indeed to become cheaper. From an investment point of view the finest condition is the best bargain, irrespective of price, and no collector likes to feel that the money he has spent has been wasted. It therefore pays to acquire fine coins, not only for their ultimate value, but also in the satisfaction such coins bring.

Some collectors prefer coins that show signs of wear, their argument being that coins were intended to circulate and should not therefore be in mint or uncirculated state. Although I do not share this view, it is defensible; but when the question of value arises, however, such collectors may easily be disappointed in the prices they are offered.

Another guide to values is derived from the prices realised at auction sales, provided that an average is struck based on the figures at several sales over a period. This is necessary, for the price fetched by any one coin at a particular sale may be governed by fortuitous circumstances not likely to recur. For instance, a collector needs one particular piece to complete a series; he may previously have tried to obtain it and always missed it by a few pounds. He comes determined this time to have the coin, only to find that someone else also wants it! The ultimate price paid by the purchaser may easily be too high. In the main, however, auction sale prices are a reliable barometer of both rise and fall in value, and should not be overlooked by anyone interested in the subject.

Another factor often adds some value to a coin, and that is its

pedigree. Rare coins which can be traced back to earlier collections acquire an additional value in most collectors' eyes; it is wise, therefore, to note carefully the names of the collections (if known) through which a coin now in your possession has passed, as this information may also be of use to any writer on that particular coinage since it may narrow down the number of specimens known. A very few collectors have actually marked their coins so that their pedigree might not be lost! This is a piece of vandalism and not to be encouraged. The best known are the Este countermark—a little silver eagle chiefly on Roman bronze coins—impressed by the Dukes of Este in the eighteenth century; the Queen Christina of Sweden countermark—a little silver-crowned C on Roman coins; and the Hutten-Czapski countermark—a minute C on Russian platinum coins. Occasionally one meets with coins on which a number in ink has been written; this is, of course, a great mistake as the acid in most inks will eat into the surface of a coin and cannot be removed.

By all means keep a note of any previous collection in which your coins have been, and see to it that this information is passed on whenever you dispose of such a piece, but do not record the fact on the coin itself.

At this juncture it might be worth your while considering insuring your collection against loss by fire, housebreaking and burglary, or against all risks. Policies for either type of cover are issued by Lloyd's underwriters at very reasonable rates, 4s. 6d. per cent. to cover fire, burglary and theft, 10s. per cent. to cover all risks. Application can be made through your own insurance broker, or any coin dealer will be glad to arrange this for you. In order to be sure that you will be paid in full should you lose your collection, it is wise to obtain a detailed valuation, again preferably from a coin dealer, so that the underwriters may admit the value when accepting the proposal. This saves a certain amount of correspondence and argument as to value should a claim arise.

Chapter 7

FORGERIES AND COUNTERFEITS

AS has already been mentioned earlier, care must be taken not to acquire forgeries instead of the genuine article. Whilst suggesting how to avoid this, it is necessary to be clear on the kind of forgeries which exist.

There are two main methods of counterfeiting coins, and with a little practice it becomes fairly easy to recognise the type of forgery one is examining. A forgery is either a cast copy of an existing coin, or it is a piece struck from a newly made die. Taking the cast copies first; these are made by molten metal poured into a mould taken from an existing coin. When the metal has cooled the mould is broken and a good copy of the original remains. The drawback, from the forger's point of view, is that it is impossible to avoid minute bubbles of air remaining imprisoned in the mould; these show up as tiny pock-marks all over the surface of such a piece, and can be spotted with a magnifying glass. A more dangerous form of casting was invented, it is said, by a dental mechanic in Egypt, who introduced the two poles of an electromagnet on each side of the mould, thereby pressing the metal more firmly into it. These are known as pressure casts, and are more difficult to detect. However, the smoothness of the metal and the absence of sharpness in the outlines of the lettering are tell-tale pointers, so that with a little practice pressure casts can be recognised and avoided.

All kinds of coins have been copied by the casting method—Greek, Roman, English, French, German, Indo-Greek and many others have passed through my hands; curiously enough, some of the coins so copied were common enough and would hardly seem worth the trouble. So do not be misled and imagine that only rarities are worthy of the attention of the forger.

By far the most dangerous forgeries are those struck from newly cut dies, faithfully copied from an original coin. When and by whom some of the older forgeries were made is unknown, but Cavino in the seventeenth century and Saint Urbain in the eighteenth both made dies for ancient coins. One of the foremost of these forgers lived in the nineteenth century, and his products still appear on the market from time to time. He was a German, Carl Wilhelm Becker, born in 1772, and seems to have cut dies from about 1805 until his death in 1830. His industry was amazing and dies for about 360 coins were preserved in the Berlin Museum. His range, too, was extensive, for he forged not only Greek and Roman coins, but also Vizigothic trientes, French deniers, German and Transylvanian coins, siege pieces, and even a few medals. Now that they are more than 100 years old and have sometimes acquired a patina, they are difficult to recognise except by style and fabric, so that a great service was rendered by the late Sir George Hill when he published *Becker the Counterfeiter* (2 vols., 1924-5), containing a biography and nineteen plates on which nearly all Becker's productions are illustrated from impressions of his extant dies.

He was followed at the turn of the century by a Greek, Christodoulos, who concentrated practically entirely on Greek coins, and there too we are fortunate in possessing Svoronos' *Mille coins faux de Christodoulos*; although the illustrations do not compare with those in Hill, they do enable his forgeries to be detected. These are equally dangerous, and the only guide again is style, and also the edge of the coin, which has a peculiar smooth look.

A digression on this question of style may not be amiss here. By style the numismatist means the general aspect of the design. For instance, when studying the coinage of Syracuse it is fairly easy to place the coins in their chronological order of appearance according to the style, ranging as it does from the purely archaic through the archaistic to the early fine style, followed by the finest style where the coins are signed by the artists themselves; then follows the decline until the style becomes purely conventional and weak.

Now an interesting factor comes into play when considering die-struck forgeries. The original artist, when designing the coin or cutting the die by hand (as used to be the case), uses his *creative* ability in so doing. The forger, however, is unable to use his creative faculty to its fullest extent since he has to approximate his design to an original; his imitative faculty becomes involved, and an expert will tell you that the comparison of a curve, for instance, produced free hand and creatively differs in subtle particulars from a similar curve imitated by someone else. Hence the emphasis on the style of coins produced by a forger; he has not been a creative artist but an imitator, and the difference in "style" can with practice be detected.

Unfortunately the forger is still at work, though it is, of course, hard to name him. There seems to be a fairly active "school" in Sicily at the present time, all the more dangerous because, aware of some of the newest processes to detect the age and composition of metals, old coins are used as blanks on which to strike the new forgeries, so that their reaction to electrolytic analysis is all that it should be. How to avoid being taken in by some of these excellently finished products is difficult to suggest. The International Association of Professional Numismatists has a service of forgery detection, and if in doubt, it would be worth your while to approach any member of the Association who will, for a small fee, submit the coin to the Committee on Forgeries, and you will eventually receive a considered and signed judgment

on the piece. I have seen some of the coins submitted from time to time, and I must frankly admit that in some cases it is exceedingly difficult to arrive at a final decision.

However, for your peace of mind, not all series of coins receive the attention of the forger. The series where counterfeits are most likely to occur are: Greek, Roman, Indo-Greek, Spanish Vizigothic, rare Anglo-Saxon pennies, Transylvanian gold and rare Italian Renaissance, although isolated pieces in other series do exist.

Whilst on this subject mention must be made of electrotypes. These are reproductions of genuine coins by the electrolytic process; an impression of each side of the coin is taken, filled with lead and the two halves soldered together. These can easily be detected by examining the edge, which is usually smooth and shows a line all the way round where the two halves meet. These were made not to deceive but for educational purposes, and on many of the electrotypes produced formerly at the British Museum, as an additional safeguard the letters M B (for Museum Britannicum) or R R (for Robert Ready, who made them) appear. They are, of course, exact replicas and were usually supplied to other museums, universities and schools, though occasionally to collectors as well, so that they do come on the market.

There is another kind of replica to which attention must be drawn, known by the generic name of "Paduans." They are really Italian late Renaissance medals in imitation of Roman sestertii. In some cases they are faithful reproductions, of Roman originals, in others the type is fanciful, having no classical prototype. They are fairly easy to recognise after some practice; as a rule they look flatter than the original Roman coins, and their style is more Renaissance in feeling. The surest guide is to compare a suspected Paduan both with a Roman sestertius and an Italian medal; the issue will not long be in doubt. A collection of

Paduans is quite desirable, and their workmanship is in some cases very lovely.

Although not in the same category as forgeries, this seems a suitable place to consider freak coins. This term is meant to cover mis-strikes, brockages and the like, all of which are bound to come up in any odd lot of coins. Mis-strikes occur when the flan slips out of the true centre of the coining-press, so that the die does not strike centrally. In theory all such mis-struck coins should be eliminated at the mint when the output of the presses is scrutinised, but somehow a few do slip through. Of course, with the old methods of striking by hand and without using a collar, such as in Greek and Roman times, off-centre strikings are quite frequent, but these would not be included in the category of mis-strikes, the term being restricted to modern machine-struck coins. Brockages—that is, coins with the impression of the same obverse or reverse die incuse on the other side—are also striking faults which should not have been issued. Brockages of Roman *denarii* exist, curiously enough, after which there is a large gap until modern times, from the period of George III to Victoria, and also amongst Indian rupees of Victoria and Edward VII. Actually such pieces are not particularly interesting as they are incomplete.

Double-headed pennies, and corresponding fanciful pieces, are hardly even freaks, as they have patently been made by dividing two pieces lengthwise and joining two obverses or two reverses together. But for ingenuity in this field credit must be given to certain Swiss watchmakers, who succeeded in hollowing out £5 and U.S. \$20 pieces, fitting in this space a complete watch movement, and hinging the obverse so that on pressing a certain spot on the milling the top springs open to reveal a watch in perfect working order! Needless to say, not very many of these exist, and they are rather expensive. I have also seen a French 100-franc piece so treated, but the interior was fitted to take a photograph or a lock of hair.

THE ART OF COLLECTING COINS

Books on the subject:

HILL, G. F.—*Becker the Counterfeiter*. 2 vols. London, 1924-5.

SVORONOS, J.—*Mille coins faux de Christodoulos*. Athens.

LAWRENCE, L. A.—“Forgery in relation to Numismatics” in *British Numismatic Journal*, Vols. II, III and IV (1905-7).

Chapter 8

REPRODUCING COINS

THERE will be many occasions when the necessity will arise for the reproducing of a coin or coins either to illustrate some paper, or for comparison with one in the hands of another collector, and several methods will be discussed here.

It is, of course, possible to make an accurate drawing if you are an artist, and the result is sometimes clearer than any other method. The drawbacks are that not all of us are artists, and that whilst the drawing may be a faithful copy, it may yet omit some vital detail which may not strike the artist. (There was, in fact, such an error in the original reproduction of a coin of Trajan for the jacket of this book!)

The easiest method is the old-fashioned one of making a rubbing. Use a good, but not too thick paper, a soft pencil, and rub gently, making sure that the coin does not shift during the process. I have seen tin-foil (silver paper) used, but this is quite unsatisfactory as it is too fragile and does not travel well. An improvement on the rubbing method is to use a press, either an old-fashioned letter-press or any other kind which can be screwed down hard. Take again some good paper, damp it (preferably with saliva!) and fold it over the coin. Place this between two sheets of hard rubber, then screw down hard and leave it a few moments. Unscrew, remove the coin still in its

paper, and dust it or rub it lightly with powdered graphite; you will have an excellent impression of both sides of the coin or medal. I have used this system for years with every success; in some cases the impression looks even better than the original! The only warning is against using this method with German bracteates or hollow-cast medals, such as the Dutch medals of Tromp, de Ruyter and the like, as there is a risk that they might become flattened in the process. In those cases neither rubbing nor impression is recommended, and we must turn to photography.

There are two schools of thought with regard to the method of photographing coins or medals. Some advocate the direct photographing of the pieces themselves—a method almost universally used in the U.S.A. and to a limited extent in Switzerland and Germany; others prefer making a plaster cast of the piece and photographing that. There are advantages and drawbacks in both methods, but to my mind the results obtained from photographing plaster casts are undoubtedly the better. The main difficulty in photographing originals is due to the differing reflection from gold, silver and copper, for the finer the coin the greater the reflection. This "shine" is difficult to eliminate, and does not make for clear definition of details. On the other hand, if the coin is oxydised, or partly discoloured, this shows up on the photograph and it is claimed that the result gives a more faithful representation of the original.

The advantage of using plaster casts is that all "shine" is eliminated, no shadows are formed, and the resultant photograph permits of the fullest examination of all details. It does, however, eliminate all traces of discoloration, since the plaster cast cannot reproduce the colour.

As plaster-cast making is not unduly difficult, and might prove useful instead of a rubbing or an impression, here are the necessary details:

Press the original coin slowly, but firmly, into molten sealing-wax (using the finest red wax obtainable) or plasticine; in both

cases dust the coin with talcum to prevent it from sticking. Whilst the sealing-wax is hardening, mix the finest dental plaster of Paris with tepid water,* stirring continuously until the mixture is like thick cream, then pour it into the mould swiftly to avoid air bubbles, tapping it well in on a hard surface afterwards for the same reason, and leave it to harden for a few hours. Then gently lift out the cast and shape the edge with a sharp knife, also smoothing the back so that it will lie flat. If you find a tendency for the cast to stick to the sealing-wax, a thin film of olive oil before pouring the mixture will usually prevent this.

Do not be discouraged if your first attempts are not entirely successful; it is largely a question of practice, and you will soon have no difficulty. If it is thought by the photographer that the dead white of the plaster gives too cold an effect, try adding a few drops of coffee to the water before mixing; the result will be a slight off-white or beige tinge which photographs very well.

Unless you are an expert, I do not recommend you to make your own photographs. The difficulty is that a precision camera is needed, and unless you are able to ensure taking the coins to exact size, the original negative will have to be enlarged so that the print neither enlarges nor diminishes the size. Any photographer used to commercial work will do this for you; it is necessary to emphasise the need for exact reproduction of size, and possibly to suggest that lighting from the side, without excessive shadows, is desirable.

Illustrations of coins in books and catalogues are usually done by using process blocks when single pieces are reproduced in the text, and by collotype (or similar) process when many pieces are illustrated together on a plate; in the latter system the illustration can be viewed through a magnifying glass to advantage, whilst the screen used in making process blocks appears as a field of dots and detail is lost when magnified.

* It is important to remember to put the plaster of Paris into the water, and *not* to pour the water on to the plaster of Paris.

THE ART OF COLLECTING COINS

Many uses can be found for photographs of coins; they add greatly to the usefulness and attractive appearance of any catalogue or card index of your collection; when exchanging information with other collectors or museums; as lantern slides, or used with an epidiascope when delivering a lecture.

An ingenious idea, and not one to be recommended, was brought to my notice by an Indian dealer—chiefly in antiques—who sent me a photograph of some rare Bactrian coins requesting the British Museum to certify on the back of the photograph that all the coins were genuine!

Since Bactrian coins have often been forged in India, the use to which the certified photograph would have been put can readily be imagined.

Chapter 9

TOKENS, JETTONS AND WEIGHTS

ALLIED to the regular coinage is a class of coin which is full of interest and has often been neglected: the "tokens" issued in various countries to supplement the need for small change, or for political propaganda or for advertisement. A very large series of these was issued in the British Isles during two periods: the first in the middle of the seventeenth century, the second at the end of the eighteenth and the beginning of the nineteenth, at times when there was an acute shortage of regular coins of small denomination. Between 1649 and 1672 local bodies and tradesmen remedied this state of affairs by issuing pence, halfpence and farthings. Although of no artistic merit, these are particularly interesting to students of local history, since they usually bear the name of the trader and the place of issue, frequently stating the trade in which he was engaged. The London tokens often bear the name of the street in which the trader was situated, and some of them depict a view of a notable building in the vicinity. Altogether these tokens supply us with a wealth of information on the conditions of life existing at that time, and fill in details which the regular coinage leaves out of account.

The eighteenth-century tokens are of a different character and do not reflect local conditions to any extent. Those struck in Anglesey and in the district around Birmingham were definitely

intended to circulate as coins, but those struck in London were more in the nature of medals, sometimes with a political flavour, sometimes made for collectors just as some postage stamp issues nowadays. Of these the best known are Spence's, which are mainly concerned with current events, Skidmore's views of notable buildings, and Pidcock's set of animals and birds to be seen in his menagerie. Apart from these there are many imitations of the George III halfpence and farthings, usually poorly executed with garbled legends, which seem to have relied on the fact that many people could not read to be accepted as change!

In the nineteenth century silver tokens were issued, usually for sixpence or a shilling, again to meet a definite need for small change. They were largely issued by corporations, boroughs and cities, and many of them are attractive.

There are two series of tokens issued in the U.S.A. in the nineteenth century which are of interest: the Hard Times tokens, of 1833-41, the size of the American large cent, which passed as currency and bear political inscriptions or advertise the trader's business, and the Civil War tokens of 1862-4, issued to counteract the hoarding of money. These came into general use and are historically interesting.

Other tokens of interest are the Russian beard token of Peter the Great, used to pay a tax on beards; the Southern Indian ramatankas, used for temple offerings; an Indian famine token, and many others.

In the same class can be grouped the many local issues of metallic currency in Germany during the inflationary period after 1918, the porcelain tokens of the same period manufactured at Meissen in Germany for many localities, and even the issues at the Onchan Internment Camp in the Isle of Man during the last war.

Closely allied to these are the jettons or reckoning counters, which were very numerous in the Middle Ages. Although originally made for use on a casting-board to help accountants in

their arithmetic before the introduction of Arabic numerals, they were used as small change when Governments failed to meet the demand. A French invention in the thirteenth century, they were later manufactured both in the Low Countries at Tournai and in Germany at Nuremberg. Many of these came to England, sometimes in great quantities, and were known as "black money" in the sixteenth century. Mention must be made also of the jettons struck in the Low Countries during the war with Spain in the reign of Elizabeth, as, although they are concerned with depicting the battles and negotiations of the contest, they are derived directly from the reckoning counter. A series of these illuminates the history of that period, and is full of interest to the student of Elizabethan times.

Finally, in this section devoted to non-official coins, it seems proper to include coin-weights, since these had their part to play in business transactions as late as the end of the eighteenth century in this country. In order to be sure that the coins offered in any transaction were not below the standard weight either through wear or through clipping, brass weights were issued showing the particular denomination against which the coins could be weighed. The earlier weights depict the type of coin, the later ones state the denomination in words. Many of the eighteenth-century weights relate to foreign coins which were accepted in England, and bear the badge of the country of issue together with the equivalent value in shillings.

Similar weights to those issued in England were also made in the Low Countries, in Germany and in France. These often come with pocket scales housed in a convenient little box, so that when journeying from place to place the merchant could be sure of receiving coins of full weight in payment. This has taken us perhaps a little far from purely collecting coins, but there is a good deal of interest in these by-ways and they should not be entirely neglected.

THE ART OF COLLECTING COINS

BOOKS RECOMMENDED

BOYNE, W.—*Trade Tokens issued in the Seventeenth Century*. London, 1889.

DALTON and HAMER.—*The Provincial Token Coinage of the Eighteenth Century*.

DALTON, R.—*The Silver Token Coinage mainly issued between 1811 and 1812*. 1922.

BURN, J. H.—*Descriptive Catalogue of the London Traders' and Coffee House Tokens*. London, 1885.

BARNARD, F. P.—*The Casting-Counter and the Counting Board*.

SHEPPARD and MUSHAM.—*Money Scales and Weights*.

Chapter 10

UNUSUAL COINS, CURIOUS CURRENCIES AND PAPER MONEY

A PART from the customary practice of collecting coins of one country, one dynasty or one denomination, some collectors are attracted by the unusual coins which have been issued from time to time, or by the primitive currencies which have served for money in some cases until quite recent times. It seems worth while, therefore, to devote some attention to these, since in their own way they are quite fascinating.

SMALL COINS

Let us take size first of all. As mentioned in an early chapter, the Greeks invented coins by substituting pieces of metal of a known weight, each guaranteed with a stamped device, for metal which had to be weighed before any business could be transacted. It therefore follows that the size of a coin depended on the amount of metal it contained, which, in turn, determined its value. Consequently there are in this series quite large coins, such as the dekadrachms (10-drachms) of Agrigentum, Athens, Syracuse and Egypt, and the dodekadrachm (12-drachms) of Carthage, though these are not so large as other later European issues which we shall consider presently. For the same reason there are very small coins, such as the gold quarter-drachm of Syracuse, and many

obols in silver, but the tiniest piece of all is the eighth-obol (hemitartemoron) of Athens, concerning which an amusing tale is told. These tiny pieces and other subdivisions of the obol were always being lost, much to the indignation of the citizens. Eventually the city fathers decided to discontinue the issue and substitute a copper coin in its stead. Since copper was less valuable than silver, these pieces would be larger and less likely to disappear. But there is no pleasing everybody! The issue of these copper coins was followed by a strike in the fish-market; the fish-wives had been in the habit of keeping their small change . . . in their mouths, but found that a few of these new-fangled copper coins now made it impossible for them to speak! Such tiny coins are hardly beautiful, but a collection of them is amusing.

There is a denomination which, though small, is artistically well worth more attention than it has received, and that is the diobol (2-obols). Many of the Greek city-states struck them, and some are absolute gems, delightful in composition and complete in detail.

In Roman times, the smallest coin generally was the quinarius (half-denarius). These are quite scarce, and a collection of them would be exceedingly interesting. The quarter-silique in silver of the Byzantine series, as also of the Ostrogoths, is another pleasant denomination to collect.

In the English series the smallest silver coin is the Maundy penny, issued since the time of Charles II up to the present day, whilst the smallest copper coin is the quarter-farthing of Victoria struck for circulation in Ceylon, though the third-farthing struck for Malta as late as George V's reign runs it a close second.

The smallest European coin is the $1/32$ -ducat in gold struck at Nuremberg in 1700. This coin was not really issued for circulation but was part of a set to commemorate the new century, the denominations being the ducat, $\frac{1}{2}$, $\frac{1}{4}$, $1/8$, $1/16$ and $1/32$, and sets containing either round or square coins could be obtained. Other small gold coins are the 5-francs 1854-5 of France, the Turkish

5-piastres, the scudo of Pius IX, the half-escudo of Spain from Philip V to Charles IV, the 400-reis of Portugal, and a number of quarter-ducats of Austrian and German states, though this list is not exhaustive. There are not many really small silver or copper coins, the 1-centime of France, Switzerland, Italy and Spain being the smallest.

Numerous small coins have been issued in India, the smallest being the silver chuckram of Travancore. In the Far East there is the gold yen of Japan, and in the U.S.A. the gold dollar of 1849-54 and the silver 3-cent pieces. During the Spanish domination in Mexico, Central and South America, a small silver coin called the *cuartilla* was struck, but the smallest pieces in that continent are the gold 4-reales of Guatemala and the silver $2\frac{1}{2}$ -centesimos of Panama.

LARGE COINS

So much for the small coins. At the other end of the scale are really large pieces issued for a variety of reasons, which are full of interest. Pride of place must go to the German issues of Brunswick, which range in denomination from $1\frac{1}{2}$ to 10 Talers and measure up to 6 inches in diameter. Their history is worth recording. Julius, Duke of Brunswick-Wolfenbüttel (1568-89) devised this ingenious method of ensuring that silver coin should be hoarded within his dominions, so that should war break out he could be certain of having sufficient financial reserves at call. He reckoned, shrewdly enough, that these large and handsome coins would almost certainly be saved and not spent. His example was followed by succeeding Dukes, and the multiple Talers they issued are real works of art. On some of them the Duke is seen riding a spirited, caparisoned horse; on others details of the workings in the silver mines are shown; and on yet others there are contemporary views of cities, and so on. More German states, including Saxony, Hamburg and Würzburg, followed

suit, and a collection of these handsome large pieces is a noble sight.

Similar large coins exist in the multiple Zecchini of Venice, the 40-ducat piece of Sigismund III of Poland, the 100- and 40-ducat pieces of Ferdinand III of Bohemia, and the 100-escudos and 50-reales of Spain. These are all regular coins with the denomination stamped on them in nearly every case, but that they actually circulated is open to question.

On the other hand, the Shrewsbury and Oxford pound pieces of 1642 and 1643 were used to pay the troops and were not merely show-pieces.

Such are some of the largest coins; there are, in addition, many double and triple Talers struck with the Taler dies but of twice or three times the thickness in the Austrian and German series. Double roubles were issued by Peter the Great of Russia, and thick multiple Talers occur both in the Polish and Scandinavia series; whilst in Switzerland Basel issued some large double Talers and Geneva a 10-franc piece in 1848 and 1851.

In the Oriental series there are some remarkable large coins, as, for example, the 10,000-dinar in silver, struck by Sultan Husain I of Persia at Isfahan in A.H. 1121 (A.D. 1709), which is 3 inches across and weighs a little over 10 ounces troy, and the splendid 200-mohur in gold of Shah-Jahan, the Moghul Emperor, struck at Shahjahanabad in A.H. 1064 (A.D. 1653) which is over 5 inches in diameter and weighs 70 ounces troy.

The above list does not by any means exhaust the scope of this section, but some of the other large pieces will be considered in the next categories.

UNUSUAL SHAPES

After size let us examine the shape of coins. Usually they are round, but many variations have appeared from time to time. In Asia Minor in the fifth century the city-state of Olbia issued some bronze pieces in the shape of a fish, and in Ancient China the

earliest coins were in the shape of a hoe, followed soon after by those resembling a knife.

Square coins were quite often struck in Germany and Austria, most probably for presentation purposes, since the dies for the round coins were used. Transylvania presents us with a number of hexagonal coins, and Akbar the Great, the Moghul Emperor who was insatiable in his search for novelty, issued square mohurs and rupees, whilst Assam had octagonal coins of the same denominations. In modern times square coins have been issued in India, and in this country we all use the twelve-sided threepence.

SIEGE COINS

By far the largest number of coins of unusual shape occur in the series of siege coins and emergency issues. There are the lozenge-shaped coins of Newark, the octagonal shillings of Pontefract, and the rectangular striking of Scarborough. Square siege coins were frequently issued by besieged European cities; at Amsterdam, Breda, Brussels, Campen, Groningen, Haarlem, Leyden and Middleburg in the Netherlands; at Aire, Cambrai, Tournai in France; at Braunau, Breisach, Frankenthal, Julich and Silesia in Germany, to name but a few. Landau, besieged by the Allies in 1702 and again by the French in 1713, issued irregular-shaped coins cut from silver plate; as long as the weight was correct the shape was of little account, so much so that on some pieces the border of the original dish can be plainly seen. In times of stress, when a makeshift mint had to be improvised, it was obviously far easier to cut the silver into square or rectangular pieces of metal and stamp these with some simple device, the date and denomination.

In the seventeenth and eighteenth centuries Sweden issued a different sort of square coin, the copper plate money, ranging in denomination from the half-daler to the huge 10-dalers of 1659, measuring 2 feet by 1 foot, and weighing over 30 pounds. Due to the drain of silver needed to pay the Danish war indemnity,

plus an abundance of copper, the problem of coinage was solved in this way, and the size and weight of these square "plates" is determined by the comparatively low value of this metal; but how even simple business transactions could be carried out with such an unwieldy form of payment is difficult to imagine.

In my view a collection of siege coins and emergency money is of the greatest interest; not all these are of unusual shape, for many pieces are round. But all of them point to the stress of unusual situations, and the history these pieces represent is full of the hopes and fears of mankind. Of no other series can it be said in the same way: "Every coin tells a story."

PRIMITIVE MONEY

Of more peculiar form still are all those pieces conveniently grouped as Primitive Money. Here there is no very definite line of demarcation between barter goods and currency, but certain articles have, by tradition, become a circulating medium, very often in connection with the payment for a wife or as an indemnity to an injured party. The commonest of these are cowries and beads. Cowries seem to have been used from China and India eastward to the Pacific Islands, to have travelled across Africa from East to West, and even penetrated America. Beads in some form or other seem to have travelled nearly as far as the cowrie, and to have been generally accepted as currency.

Another primitive currency which achieved wide acceptance is the *manilla*, closely connected with the Portuguese and Spanish slave-trade in Africa. As early as the fifteenth century references were made to the *manilla* on the West Coast, and eight to ten of these were regarded as a fair price for a slave. In shape it has the form of a bracelet with open and flattened ends, and was usually made of copper or brass. Tons of these used to be exported annually from England, chiefly from Birmingham, and although no longer currency *manillas* were encountered up-country as late as 1936, with a trading value of about 3d. Another favourite

African piece is the Katanga copper cross of the Belgian Congo and the Rhodesias, whilst hoes, anklets, wire, axeheads, knives and many other articles have been used as currency in parts of Africa. In Melanesia shells and teeth strung together were the usual mode of payment, and mention must be made of the stone money of the Caroline Islands. These circular wheels or mill-stones vary in size from a few inches to 10 or 12 feet across, and are chiefly used in Yap. Siam, too, originated some curious forms, notably the canoc money, the willow-leaf money, and above all, the bullet money, so called because it resembles the old round shot. In the Malay Peninsula we have the characteristic tin-hat money, and in Tibet the brick tea money, made from tea-leaves and sometimes twigs, steamed over boiling water and compressed into moulds. Some of these bricks were made in Russian Siberia for the convenience of trade, and a fine selection may be seen at the Tea Centre in London. There are a host of other curious currencies which have been, and in some cases still are, used, and this absorbing subject is fully dealt with and splendidly illustrated in A. H. QUIGGIN: *A Survey of Primitive Money*, to which any collector of these weird pieces is recommended to refer.

PAPER MONEY

Although hardly coming within the scope of this work, I feel that a note should be added on paper money, since, unfortunately, so many of the coins which used to be issued have been discontinued in favour of the bank-note. The earliest recorded paper currency is that said to have been issued in China under the T'ang Dynasty in the seventh century, and we know from the account of Marco Polo's travels written in 1298 that he was greatly impressed by these bank-notes of grey paper, made from the bark of the mulberry tree. In spite of his enthusiastic recommendation, the Western world did not follow suit, and it was not until 1661 in Sweden that the first actual bank-notes were issued at a time when something else besides the unwieldy

copper-plate money then in circulation became an evident necessity. These, however, only lasted for three years, as the copper money began to disappear from the country and the notes were at a discount.

Thirty years later the Bank of England, soon after its foundation in 1694, began to issue printed bank-notes much as we know them today. In addition to the Bank of England issues, many of the country banks issued notes too, chiefly in the first half of the nineteenth century, and these are of considerable local interest.

In France the earliest bank-notes are associated with the name of William Law whose "Banque Générale," later "Banque Royale," was founded in 1716, and came to an end in 1720, although some of the issues were redeemed as late as 1723. The next issues were again in troublous times soon after the beginning of the Revolution when coined money fled the country and recourse to paper money became necessary; hence the issue of "assignats" followed by "mandats territoriaux," all of which led to inflation and eventually became worthless. These are relatively common, since many victims must have had large quantities of this unredeemable paper left on their hands.

Bank-notes were also issued in other European countries, such as the Papal States, Norway and Sweden, the Two Sicilies, and several others during the early part of the nineteenth century. Towards the end of that century bank-notes for larger amounts had become almost universal, and with the outbreak of the first world war their use, even for small amounts, ousted coins from their long traditional use. Inflation in Germany in 1921-3 led to a tremendous issue of paper money, some of it specifically for collectors and printed in certain instances on silk, leather and other unusual fabrics.

In America the early colonial notes are full of interest, such as the issues of Massachusetts in 1690-1, and the many issues in the eighteenth century before the Declaration of Independence. Denominations range from 2d. to £10, though most of them are

UNUSUAL COINS, CURIOUS CURRENCIES AND PAPER MONEY

for shilling values, sometimes for odd amounts like 1s. 9d. Soon after 1776 the values were changed into dollars, and reflect the various authorities which, under the new Constitution, were empowered to issue them.

One other note issue I would like to include is that of the emergency notes printed by General Baden-Powell during the siege of Mafeking. They range in denomination from 1s. to £5, and some of them are rather crude productions.

These few and fragmentary notes on this subject may suggest an avenue of collecting to which very little attention has as yet been paid.

To sum up this whole chapter, it may be helpful to the beginner to know that if the ordinary methods of collecting do not appeal to him, there are still many unusual by-paths to explore, any one of which is of absorbing interest.

BOOKS RECOMMENDED

ON SIEGE COINS

NELSON, DR. P.—*The Obsidional Money of the Great Rebellion, 1642-9.* London, 1907.

MAILLET, P.—*Catalogue descriptif des monnaies obsidionales et de nécessité.* Brussels, 1868-73.

BRAUSE, A.—*Feld-, Noth- u. Belagerungs-Munzen.* Berlin, 1897-1903.

ON PRIMITIVE MONEY

QUIGGIN, A. H.—*A Survey of Primitive Money.* London, 1949.

Chapter 11

COMMEMORATIVE MEDALS, WAR MEDALS AND DECORATIONS

AT first sight it may seem incongruous to devote a chapter to medals in a book on coins, but there is some connection between the two which is worth attention. In Roman times, for instance, there was only a fine distinction between coins and medallions, so much so that some issues are classed as medallions although they were struck as a multiple of a coin; and many of the German multiple Talers, classed as coins, are in reality medals. The same applies to some modern commemorative issues, such as the set of 10-, 5- and 2-kronur of Iceland issued in 1930—these should be called medallic coins. So in any collection of coins there will be some border-line pieces: let this be the excuse for treating of the subject.

The modern definition of the object of a medal is to commemorate an event or to serve as a reward for distinguished conduct. Let us consider the first category. The commemorative medal is largely the invention of the Italians of the fifteenth century, who, in the full glory of the Renaissance, produced some of the finest medallic work extant, by such artists as Pisanello, Matteo de' Pasti, and their school. For them the essential significance of a medal lay in the portrait of some person represented on it; and if an event happened to be commemorated,

it was only in connection with some person whose claim to distinction above his fellows it enhanced.

It was not until the sixteenth century that certain rulers, such as the Popes and the de' Medici, realised the value of the medal as a new form of political advertisement, and developed the possibilities of the official medal to record political events of their reign. Unfortunately, too, the high artistic achievements of the fifteenth century did not last, and during the sixteenth century the decline began to set in.

As an introduction to the subject I cannot do better than to quote from an article on medallic art which appeared in *The Times* in 1916, commenting on the announcement that the President of the Royal Numismatic Society had offered prizes for the best designs for a medal to commemorate the Battle of Jutland:

"Down to the end of the Stuart period there were still good artists working in England, even though most of them were foreigners. And although the rule held good that those medals are the best which portray private men and women for the sake of their personality rather than for official or political reasons, yet even among the purely official pieces there is plenty of good work to be found. The most interesting, in many ways, are the earliest, thanks to an artless sincerity which characterises the first efforts of the English Court medallists. The use of the medal as a political manifesto is found quite at the beginning of the English series, in the medal struck at the Mint in commemoration of Henry VIII's claim to be Supreme Head of the Church. The medals relating to the defeat of the Spanish Armada have more pretension; Italian influence had by this time affected, if not the craft of the medallist, yet the ideas of those who gave him his theme. So we find ourselves in an atmosphere of allegory. It was popularly believed that the bay tree was immune from the attacks of lightning; therefore the escape of England from the power of Spain was expressed by a bay tree standing erect on an island in a tempest.

On another medal we see an ark riding safely on the stormy sea, and even if we did not know that Lord Howard of Effingham flew his flag in the *Ark Royal*, the allegory of the ship of the state is plain enough. But although medallic allegory is already in full swing, the medals are not dull or frigid, because they are in no sense academic. The craftsman's conception is still quite naïve, and the Queen's portrait is treated with almost barbaric elaboration of the details of costume. Yet if we feel that these medals are hardly worthy commemorations of the defeat of the Armada, we may be glad that nothing more ambitious was attempted at the time.

"In Nicolas Briot's medal of the 'Dominion of the Sea,' made for Charles I in 1630, we have another good specimen of the political manifesto. In that year Charles caused it to be known through the British Minister at The Hague that 'the King of Great Britain is a Monarch at sea and land to the full extent of his dominions. His Majesty finds it necessary for his own defence and safety to reassume and keep his ancient and undoubted right in the dominion of these seas'—words which have no less, if not quite the same, significance for us at the present day.

"Briot was commissioned to translate into metal this memorable declaration. His portrait of the King is accomplished in a high degree; for the rather smug expression we can hardly hold him responsible. The reverse design is simply a man-of-war in full sail, with the proud motto, 'Nec meta mihi quæ terminus orbi.' The result is completely successful, because the idea is one which can be expressed without attempting to compress a whole battlepiece within the limits of a medal. Yet that is the task which from the days of the Commonwealth onwards many a medallist was to attempt; and that sort of thing, it is to be supposed, is what most of us call to mind when the phrase 'commemorative medal' is used.

"The Commonwealth was fortunate in having Thomas Simon, the most brilliant of English medallists, perhaps the only

English medallist of the first rank. His little portrait of Cromwell, with the Battle of Dunbar as a background and, on the reverse, a view of Parliament assembled in one house, was executed by order of Parliament for distribution as a 'war medal.' But delicate as the work of the obverse is, it is only the portrait that counts, the detail of the battle requiring a magnifying glass to be visible, while the scene on the reverse is merely curious. In order to commemorate, that is, to bring things to the popular mind, something on a larger scale is required; and this Simon did for Blake's victories over the Dutch in 1653. This piece is oval, a little over 2 inches high; on the obverse there is merely an anchor, on which are hung the shields of England, Scotland and Ireland; on the reverse, within a broad border of Dutch trophies, a sea-fight. The large medals of sea-fights made by Dutch artists about the same time may be wonderfully effective, but Simon's must rank above all other naval medals for brilliance of execution. Yet even this, as a work of art, is easily surpassed by Simon in his purely personal medals, showing once more that if the pieces commemorating events of the time are successful, it is chiefly because the medallists happened to be good artists, and almost in spite of their subject.

"With the Restoration begins a string of official memorials. Dutch influence for a time is supreme. Within the first five years we have records of Charles' embarkation at Scheveningen, of his landing at Dover, of the Restoration (very allegorical), of the Coronation, of the marriage with Catherine, of the Battle of Lowestoft. The last, by John Roettier, is, of its kind, one of the most remarkable medals ever made; not in the portrait of the Duke of York, which is merely accomplished, but in the shipping on the reverse. The art of low relief has never been practised with greater virtuosity, or the translation into metal of a Dutch sea-piece been more finely achieved.

"There is no lack of medallic records of military and naval events from the reign of William and Mary onwards, but it is

impossible to find a single one of which you may say that by it the artist reveals something which you could not otherwise know, either of the historical events themselves or of the men, Marlborough or Wolfe or Nelson, who made history."

What is true of the English medal is also largely true of European medals as a whole, although both in Germany and in Holland in the early sixteenth century there are some remarkable achievements, such as the Trinity Medal of Hans Reinhart, and the large silver medallions commemorating the Dutch victories of Michael de Ruyter, Martin Tromp and others, by Muller and van Abeele.

Medals therefore merit a place, in my opinion, in a collection of coins; they can fill in certain blanks in the series, and many are full of interest. There are many ways of collecting them, according to individual preference. Miss Helen Farquhar had a fine collection of Royalist badges (those badges worn by supporters of the Stuart cause during the Commonwealth) and wrote extensively on them. I know of several collections of medals relating to the Reformation; the National Maritime Museum at Greenwich houses a splendid collection of medals connected with naval events; railway medals and aeronautical medals have their devotees as well. So may I suggest that, when you have built up your coin collection to a certain degree, it would be worth while considering what medals might usefully be incorporated.

Plaques and plaquettes are usually uniface and of square or rectangular shape, designed originally to be inserted in the wooden panels of cabinets and furniture generally. They are Italian in origin, of the sixteenth century, and usually depict allegorical scenes drawn from Greek and Roman history, lives of the saints, and similar subjects. German and French plaquettes also exist, and are still being produced. They hardly fit in with a coin collection unless the subject depicted happens to be of interest

because it is connected with a particular series collected for other than historical reasons.

In the second category are those medals intended to serve as a reward for distinguished conduct, and these hardly come into the scope of this work, although they are full of interest. There are a few, however, which are related to the coinage, and some which can be included amongst the commemorative medals, since in a sense they served a dual purpose.

Apart from the Roman medallions, some of which may easily have been presented as rewards, it is known that the gold unite of Charles I, struck first at Shrewsbury, then at Oxford, was given to officers as a medal for service at Edgehill. Many of the German Talers when struck in gold of the denomination of 10-ducats were presentation pieces given to visiting sovereigns, much as a high decoration is nowadays bestowed. They can therefore be classed as coins in view of their assimilation to the coin standard of the day. On the other hand, not a few of the memorial Talers, usually classified as coins (again, owing to their correct weight), are more in the nature of medals. In the English series quite a few of the early badges, such as those of Prince Rupert, 1645, Sir Thomas Fairfax, 1645, and the Earl of Essex, although usually included in the series of commemorative medals can also be classified as reward medals. It is not until the nineteenth century that the practice of awarding campaign and reward medals and decorations came into vogue. The subject is fully dealt with in Major Lawrence L. Gordon's *British Battles and Medals*, and would take us too far away from the original purpose of this book were we to pursue it farther.

Decorations such as the Order of the Garter, the Order of the Golden Fleece, and many others, are of considerable antiquity, and more recently many new Orders have been founded, all of which are of particular interest to the student of this subject. There are several books on the subject to which reference can be made, if this be the field of your preference.

THE ART OF COLLECTING COINS

BOOKS RECOMMENDED

ON COMMEMORATIVE MEDALS

- HILL, G. F.—*Corpus of Italian Medals*. London, 1930.
BABELON, J.—*La Médaille en France*. Paris, 1948.
DOMANIG, K.—*Die deutsche Medaille*. Vienna, 1907.
HAWKINS, E.—*Medallic Illustrations of the History of Great Britain and Ireland to the Death of George II.* London, 1885.
VAN LOON, G.—*Histoire métallique des XVII provinces des Pays-Bas*. The Hague, 1732-7.
BETTS, C. W.—*American Colonial History Illustrated by Contemporary Medals*. New York, 1894.

ON WAR MEDALS AND DECORATIONS

- GORDON, L. L.—*British Battles and Medals*. London, 1949.
DORLING, H. Taprell.—*Ribbons and Medals*. London, 1940.
STEWARD, W. A.—*The A.B.C. of War Medals and Decorations*. London, 1915.
STEWARD, W. A.—*War Medals and Their History*. London, 1915.
JOHNSON, S. C.—*The Medal Collector*. London, 1915.
CREAGH, Sir O'Moore, and HUMPHRIS, E. M.—*The V.C. and D.S.O.* London, 1921.
ROE, F. G.—*The Bronze Cross, a Tribute to those who Won the Supreme Award for Valour in the Years 1940-5*.
TROST, L. J.—*Die Ritter und Verdienst-Orden, Ehrenzeichen und Medaillen aller Souveräne und Staaten seit Beginn des XIX. Jahrhunderts*. Vienna/Leipzig, 1910.
PAYNE, A. A.—*A Handbook of British and Foreign Orders*. Sheffield, 1911.
BURKE, Sir Bernard.—*The Book of Orders of Knighthood and the Decorations of Honour of All Nations*. London, 1858—a new edition is in preparation.

Chapter 12

THE HISTORICAL IMPORTANCE OF COINS

IN one sense every coin has an historical value; it tells something of the state which issued it; it may define the extent of its territories; it enables us, by a study of style, to determine the order in which the rulers of a certain dynasty followed each other; it may show a change of religion; it may underline the boastful pretensions of a particular ruler; it may help us to reconstruct the pattern of economic life; it can show the development of artistic taste and its decline; in fact, numismatics and history are inextricably bound one to the other. Unfortunately, until recent years historians have to a great extent overlooked the assistance and confirmation which the coinage can afford, and in like manner numismatists have too often ignored the findings of history. This omission has now been recognised, and we have historians who collect coins, as well as collectors who look to the historian for assistance when coins have yielded all they can, and problems still remain. This happy marriage can only be fruitful, and both sides will gain.

One further step is necessary: the inclusion of some numismatic course in the curriculum at our senior schools and universities. Nothing can so illuminate a page of history than to hold and examine the very coins which were in use at that time, and there is very little else besides a coin that the student can own, either

because of the cost or because the examples extant are in museums.

The notable example of the Ashmolean Museum in using their coin collection to further teaching and research could well be followed elsewhere. And every school should have as part of its teaching of history a small cabinet of coins, intelligently labelled and displayed; the gain in interest would far outweigh its initial cost.

Since in a work of this nature it is impossible to cover all the ground, I shall choose a number of coins to illustrate their historical value, and within the compass of the plates at the end of the book—especially the last two—I have tried to illustrate a few choice and interesting pieces.

The earliest issue of coins in Europe came from the small island of Ægina in the Ægean Sea, probably after 650 B.C. Stamped with the figure of a sea-turtle and a punch-mark on the reverse, these silver staters were struck to further the interests of trade, particularly with Egypt, and so popular did they become that for two centuries these coins of Ægina were known as "turtles." An analysis of the locations of finds of these early "turtles" provides us with fairly accurate data as to the extent of Æginetic trading, as also of the energy and resourcefulness of these island folk. It is interesting, too, to note that the uniformity of type characterises this coinage as being an international and not a mere local currency, providing us with the earliest tangible record of international trade, and since the purchasing power of these pieces varied from place to place, we also have an early illustration of the workings of the "rate of exchange."

Next in importance I would place the silver stater of Corinth. The usefulness of a coinage which would be accepted outside the boundaries of the city-state soon became apparent, and led the rulers of Corinth to imitate the islanders of Ægina. Using their badge of the winged horse Pegasus and on the reverse a punch-mark not unlike that of Ægina, these early coins were soon circulating freely and were called "colts" by the populace. Soon

after, the artists realised the possibility of using both sides of the coins for a device, and after elaborating the punch-mark into a swastika-like pattern, they began to place a head of Athena on the reverse side of the Pegasus. A further development then took place; whilst keeping to the Pegasus for the obverse, the design of the reverse was changed on each of the subdivisions of the stater, so that the denomination of the coin could easily be determined by traders of the outside world from the type used. As a result these "colts" became one of the most widely used currencies throughout the Western Mediterranean, whilst the "turtles" retained their hold on the Eastern shores. Eventually the type of the Pegasus was copied, not only by the Corinthian colonies in Acarnania, but by many other city-states as far distant as in Sicily and Italy.

Another coinage which also eventually ruled the markets of the Greek world was the celebrated "owl" of Athens. Solon, that great Athenian statesman who was instrumental in founding its commercial power at the beginning of the sixth century B.C., also reformed the coinage, and caused to be issued a coin of double the size of that of Corinth, with the head of Athena on the obverse and an owl on the reverse accompanied by the initial letters of the city: AΘE. With only minor variations this same type was struck until the time of the Macedonian conquest in 322 B.C., a period of about 270 years (Plate I, 8). Nearly a hundred years later, Athens once more began to coin money in her own name, and although the fabric is different, and the coins larger and well spread, the same types of the head of Athena with an owl on the reverse were continued. This head of the goddess was doubtless suggested by that of the colossal statue by Pheidias in the Parthenon described by Pausanias. On the reverse the names of the magistrates responsible for the issue are added; they are of considerable interest and have made it possible to date some of the coins. So popular did the "owls" become that they were imitated in various countries—Syria, Egypt, Persia, Arabia, India, etc.; they

finally ceased to be issued about the time of Augustus when Roman Imperial issues superseded local Greek currencies. Much more could be written concerning the Athenian "owls"; their connection with the Festival of the Panathenaïc Games; the melting down of the gold statues of Nike in the Parthenon for an issue of gold "owls" needed to equip a new fleet after the great naval disasters towards the close of the Peloponnesian war; the wideness of their acceptance which has led to their being compared with the position of the English sovereign in trade in the nineteenth century. In every sense this is a coin of great historical importance.

Mention must also be made of the Sicilian issues, where the development of the artistic treatment of the design reached its highest peak. Here the interest is focused on the beauty of the piece and to a lesser degree on its place in history; nevertheless they occupy a place in the history of art comparable only to some of the masterpieces of Greek sculpture. Such a wonderful composition as Herakles struggling with the Nemean lion on the gold 100-litra piece of Syracuse by that famous artist, Euainetos, issued in 405 B.C., is brilliant in its execution, especially considering the size of the piece, which is no larger than the English silver threepence. The obverse, too, shows a fine head, that of the nymph Arethusa, for which the model was probably the daughter of some aristocratic citizen. Some years ago I visited Syracuse and sat in the very amphitheatre where the Syracusans watched the Assinarian Games, for which the large dekadrachms (or 50-litra pieces) were struck—those lovely coins with the proud head of the nymph-goddess and the victorious four-horsed chariot on the reverse (Plate I, 5). Coming away, I met a girl of about fourteen, with the same profile, the straight nose, the proud bearing; it was as if a coin I had known for long had suddenly come to life—another miracle of Pygmalion. Such a book as SELTMAN: *Masterpieces of Greek Coinage*, with its enlargements of many lovely coins, will do more to convince you of the artistic beauty and value of these creations than any words of mine can do. No

study of art is complete without reference to the Greek coinage of the second half of the fifth century B.C.

With the rise of the Kingdom of Macedon under Philip II and Alexander the Great, a new development in two different directions took place. On the one hand the gold stater of Philip II, with a head of Apollo and a biga (or two-horsed chariot) on the reverse, travelled far and became the prototype for the Danubian issues of migrant tribes. It passed into Switzerland, thence into France, and eventually across the Channel to England, each Celtic tribe copying and re-copying the coins of its neighbour until the degeneration of the original type was complete. The head of Apollo became a mass of hair and a tiny face; the charioteer, separated from his chariot of which only one wheel remained, driving a single horse! The British copies degenerated even further. A vague wreath is all that remains of Apollo, and a disjointed horse—crudely drawn as if by a child—can only by a stretch of imagination be linked with the victorious charioteer.

Another development was inaugurated by Alexander's successors in the kingdoms into which his empire split after his death; the entirely new practice of placing their portraits on their coinage. Lysimachus of Thrace was an exception in that he placed a deified head of his benefactor, Alexander, on his coins, but even that was contrary to Greek opinion, which, until then, had considered it impious to portray living men. And so was born the practice—to which we still adhere in the few kingdoms left in the modern world—of placing the ruler's head on the obverse of his coins.

Passing on to Roman times, in 269 B.C. a silver coinage was introduced for use in Rome's developing territories in Central Italy, instead of the cumbersome bronze coinage then current. This was the predecessor of the denarius, issued about fifty years later, which has had such a profound and lasting effect on the history of coinage. From it was derived the French denier, our own penny (still labelled on all our accounts as *d.*), the Arabic dinar, and all the variants of its name in other European lands.

Historically the denarius is full of interest. In Republican times the types were exceedingly varied and often commemorated the distinguished achievements of an ancestor of the moneyer. Sometimes legendary heroes were represented, such as Ulysses being welcomed by his dog on his return home, or the Nine Muses, or Æneas rescuing his father, Anchises, from the sack of Troy. These and many other types help us to realise the life and thought, the hopes and fears of those times as nothing else can do. With the Imperial issues begins a long series of portraits of the Emperors, their wives, sons, daughters, sisters, brothers, and even grandmothers—a portrait gallery rich in the extreme, whilst the reverse depict all, or nearly all, the gods of the Roman Pantheon, commemorate victories, journeys, public rejoicings and many other events, or portray public buildings, statues, bridges, ports and other places of interest.

The French silver denier, first coined by Pepin le Bref (A.D. 752-68) to take the place of the earlier Merovingian gold triens, was directly based on the Roman denarius although differing in types and weight, and its extension was in great part due to his successor, Charlemagne (768-814), who after the foundation of the Holy Roman Empire in 800 struck deniers of the same type for all his possessions, whether in France, Germany or Italy. Offa, who as a young man had been at the French Court, introduced the denier, or penny, into England soon after he became King of Mercia, about A.D. 760, and here too this new coin found favour. It became the sole denomination (with the exception of a few halfpennies) until the reign of Edward I, when the groat (or fourpence) was first struck in 1279.

One of the results of the repeated Danish invasions and the payment of vast sums in Danegeld was to familiarise Northern Europe with the English penny, and this led to its being copied by several countries, where they became known as esterlins (a corruption of sterling). We therefore find that practically the whole of Western Europe was using the silver penny in its

various forms, issued by many small independent states as well as by the larger kingdoms, and this coin remained the sole currency for about 500 years. A collection of pennies, together with their European counterparts, would provide the basis for an understanding of the economic and political history of this none too easy period.

There are many ways in which this early penny can be illuminating. Sir Frank Stenton in an exceedingly interesting lecture on the occasion of the National Numismatic Congress in May 1954 dealt with several aspects of the currency between A.D. 975 and 1100, and suggested that a great deal of racial information could be obtained by studying the spelling of the names of the moneyers of that period. (It was the common practice of the Anglo-Saxon kings, and also the later Normans down to Edward I, to appoint moneyers in the various towns to strike coins, and as a guarantee of weight and fineness the name of each moneyer and the mint had to be inscribed on the reverse, see Plate III, 2-15.) As an example, the ninety-one moneyers at York during the period under review provide us with seventy-four of Scandinavian origin, as evidenced by the spelling of their names.

Then, too, the study of the mint names is linked with local history, and many problems remain to be solved. For instance, were coins bearing the mint name HAMTUN struck at Northampton or Southampton? What is the relation between HAMWIC and Southampton? Was PERESC Pershore and MYLE Milborne? And where was Ythanceastre? Without the aid of the historian we shall not know the answers. On the other hand, the coins themselves indicate the existence of places of sufficient importance to have moneyers, and may lead to a revaluation of the evidence on hand regarding certain towns. It must not be assumed that only the older coins are historically important. There is still much to be learnt in practically every series, in nearly every epoch. The coinage of the East India

Company and its relation to the issues of the later Moghul Emperors has never been adequately studied. Much remains to be done as regards the early coinage of the Spanish dominions in the New World. The story of the Maria Theresa Taler of 1780 and its continued use in Ethiopia until the present day has already received a good deal of attention, but the last word has not been said. In fact, wherever we turn there are questions waiting for answers, new fields of enquiry ready to hand—a veritable paradise for the curious mind.

I am tempted to end rather where I began—that is, with the 1954 coinage, and suggest that even these coins are replete with historical lore. Consider the portcullis on the threepence, the badge of the City of Westminster. It is linked with the portcullis on the currency struck by Elizabeth I in 1600-1 for the newly chartered East India Company. It also occurs as a mint mark under Henry VIII, Elizabeth and Charles I. On the reverse of the sixpence, the florin and the crown the Welsh emblem (the leek) appears for the first time on any English coin, whilst the inscription FID. DEF. (*Fidei Defensor*) takes us back to Henry VIII who, paradoxically enough, received this title from the Pope for his treatise against Martin Luther! The ship on the halfpenny continues the tradition of British naval supremacy, and is not unlike that on the noble of Edward III, where it was first used.

The Queen on horseback on the 1953 crown reminds us of the issues of James I and Charles I, although it is the only instance of a mounted Queen I can recall.

If all the above lines of thought can be suggested by the latest issue of coins, it is easy to see how practically *any* coin is of interest, if only you will examine it and learn to understand what it has to tell you. That is the real purpose behind this book: to attract your attention to this subject, to help you to join those who delight in coins, to recruit you as a researcher in this field, and to share with you the beauty and the romance which can be enjoyed by a contemplation of these relics of the past.

Chapter 13

BOOKS

“OF the making of many books there is no end,” the ancient seer wrote, and this is as true of numismatics as of any other subject. There inevitably comes a time, however, when the collector needs to know more about his coins than he can decipher on them, or to discover what he lacks, or to learn the reason why certain issues were made. It is essential, therefore, to turn to the appropriate literature, which will do much to heighten the interest of the collection at every stage in its development.

The main purpose of this chapter is to try to select such books as may best serve to supply the information a beginner needs. The Select Bibliography at the end will include these, as well as others, conveniently grouped for ease of reference, so that if needs be, any given subject can be pursued further.

There is a number of general works which will be found exceedingly useful as an introduction to the subject, and may help you to decide on the particular series you would like to collect. I would suggest, MILNE, SUTHERLAND and THOMPSON: *Coin Collecting*, and RAWLINGS: *Coins and How to Know Them*. Both concentrate mainly on Greek, Roman and English coins, but they do form a good general introduction.

Passing to Greek coins, SELTMAN: *Greek Coins*, which has long been out of print, is shortly being revised and reprinted, and will be found most convenient as a general history of this series.

An interesting work is WARD: *Greek Coins and their Parent Cities*, consisting of two parts; the first a catalogue of his collection, accompanied by twenty-two beautiful plates and many illustrations in the text; the second, entitled *Imaginary Rambles in Hellenic Lands*, relates the coins to their historical and geographical background, and is also fully illustrated. Next comes HILL: *Historical Greek Coins*, which, though selective, relates the coins to their historical background. On the artistic side I would recommend SELTMAN: *Masterpieces of Greek Coinage*, and in more condensed form a King Penguin, SELTMAN: *A Book of Greek Coins*, both of which are excellent. The standard work on Greek coins, which is essential as a reference book, is HEAD: *Historia Numorum—A Manual of Greek Coins*; there will come a time when you will need it, although it is perhaps not the ideal introduction. There is a very large number of special studies and monographs on particular series and mints, some of which are mentioned in the books listed above, and for any detailed study reference will have to be made to the catalogues of well-known collections, such as the British Museum (twenty-nine volumes); the Hunterian Collection, University of Glasgow (three volumes); the McClean Collection, Fitzwilliam Museum (three volumes), and those collections published under the title "*Sylloge Nummorum Cræcorum*," both in England and in Denmark.

The best introduction to Roman coins is still MATTINGLY: *Roman Coins, from the Earliest Times to the Fall of the Western Empire*. HILL: *Historical Roman Coins* follows the same lines as his companion volume on Greek coins, and will be found full of interest. As regards classification of the coinage, SYDENHAM: *The Coinage of the Roman Republic* is the latest work on what used to be called Consular coins, and largely supersedes two earlier works by BABELON and GRUEBER. For the Roman Imperial coinage, COHEN: *Description historique des monnaies frappées sous l'empire romain* (eight volumes) is still largely used, although it is unscientific in its arrangement. MATTINGLY and SYDENHAM: *The*

Roman Imperial Coinage is more logically arranged, and is not too difficult to use after a little practice; nine volumes have been published so far.

The most useful work on the Byzantine series is GOODACRE: *A Handbook of the Coinage of the Byzantine Empire*, published in three parts; it presents historical details and coin-types very simply but completely. The standard reference book is, however, WROTH: *Catalogue of Imperial Byzantine Coins in the British Museum* (two volumes).

There are also many other specialised books and monographs, of which I would select two, GRANT: *Roman Anniversary Issues*, and SUTHERLAND: *Coinage and Currency in Roman Britain* for special mention.

The standard reference works on British coins are BROOKE: *English Coins* and GRUEBER: *Handbook of the Coins of Great Britain and Ireland in the British Museum*, the latter being particularly valuable for its inclusion of Scottish and Irish coins in one and the same volume. Reference is still made to two earlier works, KENYON: *The Gold Coins of England* and HAWKINS: *The Silver Coins of England*, but they are not indispensable. For copper coins BRAMAH: *English Regal Copper Coins*, and GARSIDE: *British Imperial Copper and Bronze Coinage, 1838-1925* are most useful. Ancient British coins are fully dealt with in MACK: *The Coinage of Ancient Britain*.

B. A. Seaby Ltd. have published a series of handbooks on British coins, which are particularly valuable to the new collector; they include the *Standard Catalogue of the Coins of Great Britain and Ireland*, *Notes on English Silver Coins, 1066-1648*, *English Silver Coins, 1649-1949*, and *A Catalogue of the Copper Coins and Tokens of the British Isles*. There are many other publications on special series, details of which are given in the Appendix.

Turning to European coins only a few of the many books can be suggested here, and I select those to which I most constantly refer. For mediæval coins generally THOMSEN: *Catalogue de la*

Collection de Monnaies is most useful although it has too few illustrations. Another general work is HAZLITT: *The Coinage of the European Continent*, as it has useful lists of mints, rulers, etc. and is fairly well illustrated.

On French coins, BLANCHET and DIEUDONNE: *Manuel de numismatique française* is invaluable; the new work by LAFAURIE: *Les monnaies des rois de France*, of which only Volume I has been published as yet, will be excellent when complete.

GUILLOTEAU: *Monnaies Françaises — Colonies 1670-1942 — Metropole 1774-1942* (more generally known as V.G.) is widely quoted for the period since the Revolution, and contains useful mint records and historical details.

The best general catalogue on German coins before 1871 is REIMMANN: *Münzen- und Medaillen-Cabinet*, which describes the very large and comprehensive collection made by Herr Johann Reimmann of Hanover. For German coins after 1871 I would suggest JAEGER: *Die Deutschen Reichsmünzen seit 1871*, which lists all the types, dates and numbers struck of each denomination. Austrian coins are fully dealt with in MILLER ZU AICHHOLZ: *Oesterreichische Münzprägungen, 1519-1938*. No general work on Italian coins exists apart from the *Corpus Nummorum Italicorum* (unfortunately unfinished) which is largely a catalogue of the late King of Italy's collection in nineteen huge volumes. For quick reference I have found the *Catalog der Sammlung des Herrn Cav. F. GNECCHI* in Mailand by far the most useful.

On Swiss coins, POOLE: *A Descriptive Catalogue of the Swiss Coins in the South Kensington Museum* is quite useful, although CORRAGONI: *Münzgeschichte der Schweiz* is the more generally used work, chiefly for its plates, as the text is inadequate. As regards Spain, the best introduction is MATEU y LLOPIS: *La moneda española* as HEISS: *Descripcion general de las monedas hispano-cristianas*, although the standard work, is completely unobtainable. Portuguese coins are generally described according to VAZ: *Catalogo das Moedas Portuguesas Continental, 1640-1948*,

which is well illustrated. For Belgian coins the standard work is DUPRIEZ: *Monnaies et essais monétaires du royaume de Belgique et du Congo Belge*, but there is no modern work on the older Dutch coins until we come to SCHULMAN: *Handboek van de Nederlandsche Munten van 1795-1945*, which has become the standard work for the period it covers.

Danish and Norwegian coins are fully covered by SCHOU: *Beskrivelse af Danske og Norske Mønter, 1488-1814, og Danske Mønter, 1815-1923*, but for Swedish coins the easiest guide is BRUUN: *Mønt og Medaille-Samling*. For Russian coins the most useful work is PETROV: *Catalogue des Monnaies Russes*, which has excellent plates although no historical data. The standard work on Polish coins by HUTTEN-CZAPSKI is impossible to obtain, so I again rely on a catalogue: *Sammlung des Herrn Sigismund von CHELMINSKI*, as it has seventeen plates and is a very comprehensive collection.

Modern European silver crowns are to be found well classified and illustrated in the following two books: DAVENPORT: *European Crowns since 1800*, and DAVENPORT: *German Talers since 1800*, which I do recommend to anyone collecting that size of coin.

For the rest of the world it will be easier to group the books of most use within the framework of the European colonial systems, although here again specific works on individual countries do exist.

The only general work on the coinage of the British Colonies, although badly in need of revision, is ATKINS: *The Coins and Tokens of the Possessions and Colonies of the British Empire*. I also recommend PARSONS: *Coinages of British Africa*, and only wish that this admirable monograph could be continued for other sections of our colonial coins.

The French Colonial Empire has been well served by MAZARD: *Histoire monétaire et Numismatique des Colonies et de l'Union Française, 1610-1952*. Similarly for the Dutch Colonies, SCHOLTEN: *The Coins of the Dutch Overseas Territories, 1601-1948*

is an admirable work. For the Spanish Colonial Empire a handy reference book is GUTTAG: *Latin-American Coins*. Although purely a catalogue, it is fully illustrated and covers a lot of ground. Restricted to the "duro" or dollar, but well arranged, is HERRERA: *El Duro*, which is my second choice. For gold coins, RAYMOND: *The Gold Coins of North and South America* is a useful compilation.

The coinage of the United States is conveniently listed in RAYMOND: *The Standard Catalogue of United States Coins from 1652 to Present Day*, or YEOMAN: *A Guide Book of United States Coins*. Canadian coins are similarly dealt with in CHARLTON: *Catalogue of Canadian Coins, Tokens, and Fractional Currency*. There are several other works on special series of U.S. coins, but they are not essential, at any rate for the beginner.

Turning to Oriental coins, as the script is in most cases difficult to read I fear that these must be left to the specialist, although some series have been dealt with in a form easier for Westerners to follow. Of these I suggest BROWN: *The Coins of India* as a very good introduction to the coinage before the East India Company. A larger work and most useful is the *Catalogue of the Coins in the Indian Museum, Calcutta* in four volumes. I have also found VALENTINE: *The Copper Coins of India*, and his companion volume *Copper Coins of the Muhammadan States* easy to follow. Rather specialised, but very readable, are ELLIOTT: *Coins of Southern India* and CODRINGTON: *Ceylon Coins and Currency*.

Books on coins of the Far East, curiously enough, are easier to follow and I recommend these: SCHJOTH: *The Currency of the Far East*. KANN: *Illustrated Catalog of Chinese Coins*. JACOBS and VERMEULE: *Japanese Coinage*. SCHROEDER: *Annam, Etudes Numismatiques*. LE MAY: *The Coinage of Siam*. The titles are self-explanatory, and all of these books are well illustrated.

For books on jettons, tokens and medals I would refer you to the Bibliography, as to some extent these subjects are side-lines to the main purpose of this book.

Lastly, for a comprehensive catalogue on modern coins, rather following the pattern of stamp catalogues, the two companion volumes by RAYMOND: *Coins of the World—Nineteenth-century Issues*, and *Twentieth-century Issues* will be found invaluable.

There are two other books which you may find you need; one is Everyman's *Dictionary of Dates*, the new revised edition just published; the other Webster's *Biographical Dictionary*. I shall include one or two more books of the same general kind in Appendix B, but I thought I should mention at least these two here.

Whilst this chapter was in preparation, an exceedingly useful Bibliography was published which saved me a good deal of time in checking correct titles and dates of publication. I therefore recommend it highly, and have made considerable use of it for my own Select Bibliography. Our approach, however, is somewhat different, as Mr. Grierson's aim is to provide an aid to students of history, whilst I am trying to interest you in coins first, and through them to stimulate your historical enquiry. The booklet is entitled:

GRIERSON, P.—*Coins and Medals—A Select Bibliography*. London, 1954.

Envoi

I have enjoyed writing this book, and although I realise how incomplete it is I yet hope that it will have interested you, perhaps given you an urge to collect coins, and, more important still, awakened a desire to find out more about them.

After many years of handling coins, and with a considerable library to my hand, it surprised me to discover what large gaps in my knowledge still exist. The more I looked into certain questions, the more fascinating did they become.

So may I end by wishing you every success in your collecting, and add that if I can be of any assistance, I shall be only too glad to hear from you.

Appendix A

A SELECT LIST OF NUMISMATIC TERMS AND NAMES

A note of explanation. In compiling this select list of numismatic terms and names I have had two aims: to include the more common terms and names, and to keep the definitions short. It follows therefore that some terms or names you may come across are not included, but I had to draw the line somewhere! As to the definitions, I have tried to include enough to enable you to understand the term, or to identify the coin, leaving you the task of consulting the appropriate textbook for more detailed information. I would like to acknowledge here the help I derived from FREY: *Dictionary of Numismatic Names*; I have not infringed its copyright, but rather used it as an *aide mémoire*, in order not to miss a term or name which should be included. If here and there his definitions and mine seem to be alike, this arises from the fact that there are not two ways of accurately describing certain coins or terms. On the other hand, Frey should be used with caution; his book was first produced in 1917, and some of the information contained in it has been considerably modified by later knowledge.

A

ABBASI—A Persian silver denomination.

ABBEY PIECES—Tokens issued by some monastic foundations, partly for pilgrims, partly as reckoning counters.

ACKEY—A silver coin issued by the African Company on the Gold Coast, 1796 and 1818.

ACMONITAL—Stainless steel, used for minor coins of Italy, 1939-45.

Æ—For *æs* = copper or bronze.

APPENDIX A

- ÆS GRAVE**—The heavy cast bronze coinage of the early Roman Republican system.
- ÆS RUDE**—The earliest primitive bronze pieces of various shapes, which circulated as money before the æs grave.
- ÆS SIGNATUM**—The intermediate type of Roman cast bars with early stamps on them.
- AFGHANI**—A silver coin of Afghanistan first issued by Amanullah in 1926.
- AGNEL**—A French gold coin with the paschal lamb, first issued under Philip IV in 1316 and continued until the reign of Charles VI (1380-1422) although it seems also to have been known as a *Mouton d'or*.
- A. H.**—Anno Hegiræ. The Muhammadan era starting in A.D. 622.
- ALBUS**—Its full name was *Grossus albus* or white groat, due to its white appearance. Current in Germany and the Netherlands in the fourteenth and fifteenth centuries.
- ALEXANDRIAN COINAGE**—The long and plentiful issues in Roman Imperial times at Alexandria for Egypt.
- ALTILIK**—A Turkish base-silver coin.
- ALTMISHLIK**—A Turkish silver coin.
- ALUMINIUM**—A very light metal which resembles silver and has been used for tokens and for coins of France, Germany, Roumania and other countries in modern times.
- AMANI**—A gold coin of Afghanistan first issued by Amanullah in 1919.
- AMULETS**—Charms against the evil eye, disease and other calamities, chiefly known in the Chinese and Korean series.
- ANEPIGRAPHIC**—Without inscription.
- ANGE D'OR**—Another issue of Philip IV of France, with a crowned angel facing.
- ANGEL**—A gold coin first struck under Edward IV and continued until the reign of Elizabeth. It derives its name from the type of St. Michael trampling on the dragon.
- ANGELET**—A half-angel.
- ANGELOT**—Corresponding to the angelet in the Anglo-Gallic series; first issued by Henry VI about 1427. It was then imitated in Brabant and Luxemburg as well as under Louis XI of France.
- ANGLO-GALLIC MONEY**—The issues by English kings for their French domains, chiefly in Aquitaine.
- ANGSTER**—A little Swiss base-silver coin from the fifteenth to the nineteenth centuries.

APPENDIX A

- ANNA—An Indian copper coin, the sixteenth of a rupee.
- ANNULET—A small circle used in the legends to separate words, hence the *annulet coinage* of Henry V and Henry VI.
- ANT'S NOSE MONEY—A primitive Chinese currency, based probably on the cowrie.
- AR—For *argentum* = silver.
- ARC—The division of a tressure, such as often enclosed the type on early English coins.
- ARCHAIC—The earliest style of Greek coinage, somewhat stiff and hieratic in execution.
- ARGENTEUS—A name given to the reformed *denarius* issued by Diocletian (A.D. 284).
- ARGENTINO—A gold coin of Argentina equivalent to the British sovereign.
- ARI—An Albanian term for gold.
- AS—One of the denominations of the Roman *æs* grave.
- ASHRAFI—A gold coin of Bahawalpur struck in 1935 by Sadig Mohammed V.
- ASPER—A coin struck at Trebizond under the Comnenes, later in Rhodes and in Georgia, from the thirteenth to fifteenth centuries.
- ASSIS—A base-silver coin issued in Basel, Strasburg and Luxemburg during the seventeenth and eighteenth centuries.
- ATIA—A copper coin of Diu in the Portuguese Indies.
- ATT—A Siamese copper coin.
- AUGUSTALIS—A gold coin of Frederick II struck at Brindisi for his Southern Italian dominions, copied largely from the Roman *aureus*.
- AUR (also *Aurar*)—A small Icelandic copper coin, one-hundredth part of the Krona.
- AUREUS—The usual denomination of the Roman gold coin from the time of the Republic until superseded by the *solidus*.
- AUTONOMOUS—The right to strike money without external authority.
- AV—For *aurum* = gold.
- AVOS—The unit of value of Timor since 1926.

B

- BACCHANALIAN COINS—The name given to certain gold mohurs of Jahangir, the Mughal Emperor, showing him holding a wine-cup.
- BAGATTINO—A small Venetian copper coin, later issued in other Venetian colonies fifteenth to seventeenth centuries.

- BAIOCCO**—A coin of the Papal states.
- BAIZA**—The unit of value of Muscat and Oman, first struck in 1942.
- BALBOA**—The unit of the gold standard of Panama. In 1931 a silver balboa was also struck.
- BANCO**—A term applied to a currency of reduced standard either in weight or fineness. It is used particularly in Germany and Sweden.
- BANU** (plural Bani)—A Roumanian copper coin, one-hundredth part of one leu.
- BARRINHA**—A small gold bar coin of Mozambique struck under Maria II of Portugal. There are two denominations, $2\frac{1}{2}$ and $1\frac{1}{4}$ maticaes.
- BAT**—The Siamese equivalent of the tical.
- BATZ** (plural Batzen)—A Swiss billon coin originating in Berne.
- BAWBEE**—A Scottish billon coin struck by James V and continued until William III.
- BAZARUCO**—A Portuguese colonial coin issued for its Indian possessions.
- BELGA**—A money of account of Belgium, equal to five francs, introduced in 1930.
- BELL MONEY**—A primitive Chinese copper piece resembling a bell.
- BESA**—A copper coin of Italian Somaliland.
- BESHLIK**—A Turkish silver coin, later issued in billon in Egypt, Tunis and Tripoli.
- BICHE**—A French colonial copper coin of Mahé.
- BIGA**—A Greek or Roman two-horsed chariot.
- BILLON**—A base metal containing mostly copper and often silver-washed.
- BIT**—The centre of a Spanish dollar cut out and counter-stamped for certain of the West Indian islands and in New South Wales. It is also used on the coinage of the Danish West Indies.
- BLACK DOGS**—The English nickname for the Cayenne sou, which was introduced in some of the West Indian islands.
- BLACK MONEY**—A term applied to certain French billon coins which also circulated in England.
- BLACKSMITH HALF-CROWN**—A crudely struck half-crown of Charles I, issued at Kilkenny in Ireland in 1642.
- BLANC**—A French fourteenth-century silver coin, later debased.
- BLANK**—The prepared piece of metal on which the die impresses the coin.

APPENDIX A

- BODLE**—A Scottish copper coin, struck between 1677 and 1687, worth twopence.
- BOGASH**—A copper coin of the Yemen, one-fortieth of the imadi (*q.v.*).
- BOLIVAR**—A silver coin of Venezuela.
- BOLIVIANO**—A silver coin of Bolivia, 1864-93. It was next struck in bronze in 1952.
- BOLOGNINO**—A silver coin of Bologna, first struck in the period 1191 and 1337. It became later a copper coin and was also issued in Modena and Lucca.
- BONK**—The popular name for the rectangular copper coins of Java (1796-1818).
- BONNET PIECE**—A Scottish gold coin of James V issued in 1539 and 1540. So called from the bonnet worn by the King. One-third and two-thirds bonnet pieces also exist.
- BONNET TYPE**—The name given to one of the types of William I pennies showing him wearing a curiously shaped crown.
- BOX TALER**—A hollowed-out German Taler usually containing a set of engravings or portraits. Mainly issued in Augsburg and Nuremberg.
- BRACTEATE**—A term used to designate those very thin German coins of the twelfth to the fourteenth century with the same type on both sides, one in relief, the other incuse. This method of manufacture allowed the use of a larger die whilst not increasing the weight of the metal. Bracteates are also found of Switzerland, Hungary, Bohemia, Poland and Scandinavia.
- BRASHER DOUBLOON**—An American gold coin struck in New York in 1787 by Ephraim Brasher.
- BRASS**—A former unscientific name applied to Roman bronze coins, grading them according to size as First Brass, Second Brass or Third Brass.
- BREECHES MONEY**—A term sometimes applied to the coins of the Commonwealth, owing to the two shields having some resemblance to a pair of breeches.
- BRICK TEA**—A unit of value, made of compressed tea-leaves, in Tibet and Chinese Turkestan.
- BRIDGE MONEY**—A primitive Chinese piece of money resembling a bridge.
- BRIOT CROWN**—A crown of Charles I of 1633 by Nicholas Briot, superior in finish to the normal issues.

APPENDIX A

- BRITAIN CROWN**—A gold denomination struck by James I in 1604.
- BRITANNIA GROAT**—The silver fourpence of William IV and Victoria with Britannia seated on the reverse. This is a type distinct from the Maundy fourpence.
- BROAD**—A gold coin, value twenty shillings, issued under the Commonwealth, Cromwell and the first issue of Charles II.
- BROCKAGE**—A mis-struck coin with the same type reproduced incuse on the other side.
- BRONZE**—A metal alloy 95 per cent. copper, 4 per cent. tin and 1 per cent. zinc.
- BU**—A small rectangular Japanese coin usually of base gold, though later issued in silver.
- BULLET MONEY**—Another name for the Siamese tical owing to its shape.

C

- CANDAREEN**—A Chinese denomination, one-tenth of a mace. The Chinese dollar is inscribed 7 mace 2 candareens, the mace being a tenth of a tael.
- CANOPY TYPE**—One of the types of William I pennies, where a canopy is shown above the King's head.
- CARAMBOLE**—The name given to the ecu of Louis XIV for Flanders. It was heavier in weight in order to compete with the Flemish ducatoon.
- CARLINO**—A silver coin issued in the Two Sicilies, Bologna and Malta.
- CAROLIN**—A Swedish gold coin equivalent to ten francs.
- CAROLUS**—A billon coin of Charles VIII of France (1483-98).
- CARTWHEEL**—A term applied to the heavy copper twopence of George III dated 1797.
- CASH**—A Chinese copper coin originally, and for many centuries, with a square hole in the centre.
- CASH**—Denomination issued in Mysore and Travancore.
- CAVALLO**—A small copper coin of Ferdinand I for Naples and Sicily (1458-94) and continued until the end of the eighteenth century.
- CAVALLOTTO**—A silver coin issued for Asti and several other Italian states in the sixteenth century.
- CENT**—A copper coin of the U.S.A., one-hundredth part of a dollar. Also used in a number of British colonies, China, the Philippines, Liberia, Cuba, and as a hundredth of the rupee in Ceylon, Mauritius and Seychelles.

APPENDIX A

- CENTAS** (plural Centu and Centai)—A bronze coin of Lithuania, 1925-38.
- CENTAVO**—A copper coin of Mexico, Central America and some South American countries.
- CENTESIMO**—A copper coin of several Italian states, the Kingdom of Italy and Uruguay.
- CENTIME**—A copper coin of France and its colonies, Belgium, Monaco, Luxemburg, Switzerland and Haiti.
- CENTIMO**—A Spanish copper coin, also issued in Morocco, Venezuela, Costa Rica and Dominica.
- CHAISE**—A French gold coin first struck by Philip IV (1285-1314). It also occurs in the Anglo-Gallic series under Edward III and Edward, the Black Prince, and Ludwig IV of Bavaria.
- CHALKOS**—An ancient Greek copper coin, chiefly issued by the successors of Alexander the Great.
- CHERVONETZ**—A gold coin, value ten roubles, issued by the U.S.S.R. in 1923.
- CHIAO**—A cupro-nickel coin of Manchukuo, issued in 1933.
- CHO GIN**—A primitive Japanese bar, usually of low silver content.
- CHOPPED DOLLAR**—A name given to the Mexican dollar when counter-stamped with Chinese marks or "chops" by traders or money-changers who thereby guaranteed its genuineness.
- CHOU**—A bronze coin of Korea, first issued in 1905.
- CHUCKRAM**—A silver coin of Travancore.
- CINCUENTIN**—A very large Spanish silver coin of fifty reales struck under Philip III, Philip IV and Charles II.
- CINQUINA**—A silver coin of Ferdinand I for Naples and Sicily (1458-94). Also a Maltese copper coin.
- CIRCA** = about—Often used in connection with uncertain dates.
- CISTOPHORUS**—A silver coin equivalent to three Roman denarii, originating in Pergamum and so called from the *cista mystica*, the chest of Bacchus, from which serpents are escaping.
- CLIPPED**—Used to describe coins from which a certain amount of metal has been dishonestly trimmed.
- COB MONEY**—A name given to early Mexican and South American gold and silver coins crudely struck without a collar.
- COLOMBIANO**—A Bolivian peso issued at Bogota between 1834 and 1850.
- COLON**—The unit of gold for Costa Rica. Also issued in Salvador in 1925 to commemorate its fourth centenary.

- COMMUNION TOKENS—A series of tokens issued by the Church of Scotland to exercise a check on its members partaking of Holy Communion. They are also known in the Presbyterian churches in Canada.
- CONCAVE COINS—A name given to coins convex on one side, concave on the other, such as the late Byzantine nomismata. Also described as scyphate.
- CONDOR—A gold coin of Chile and Ecuador.
- CONSECRATIO—A type of Roman coin, usually with this legend, struck to pay divine honours to a ruler.
- CONSULAR COINS—An earlier name for the Roman Republican coinage, as the name of the Consuls frequently appears on them.
- CONTORNATES—A peculiar class of Roman medallions with a groove encircling the outer edge of the design.
- CONTRIBUTION COINS—A name applied to certain German silver coins struck to pay an indemnity.
- CONVENTION MONEY—Another name for coins issued in alliance by several states. It is mostly used in connection with certain German coins of a particular conventional standard, accepted therefore outside their own borders.
- COPPER—Originally much used as a metal but now displaced largely by bronze.
- CORDOBA—A silver coin of Nicaragua.
- CORNABO—A silver coin of the Renaissance period issued in Northern Italy.
- CORNUTO—A silver coin of Savoy, sixteenth century.
- CORONA—A Neapolitan silver coin first issued under Robert of Anjou (1309-43). The term also appears, as a translation of krona, on modern Austrian coins.
- CORONATO—Another Neapolitan silver coin issued under Ferdinand I (1458-94) and continued by his successor.
- COUNTER—Another name for a token coin, or for a piece used in conjunction with a casting-board to facilitate counting.
- COUNTERFEIT—A false coin.
- COUNTERMARK—A stamp punched on a coin to alter its value or change its locality.
- COURANT—A term used chiefly on Scandinavian coins to distinguish currency for internal use from that with wider acceptance.
- COURONNE D'OR—A French gold coin issued between 1226 and 1350.

APPENDIX A

- COWRIES**—A species of shell much used as a primitive currency in many parts of Africa and also in Asia.
- CROOKSTON DOLLAR**—A name given to the Scottish crown of Mary and Darnley, on the mistaken belief that the tree on the reverse represents the famous yew at Crookston Castle under which they are said to have courted.
- CROWN**—As a gold coin, first issued by Henry VIII and continued until 1662. As a silver coin, first issued by Edward VI in 1551 and continued until this day.
- CRUZADO**—A gold, and later a silver, Portuguese coin.
- CRUZEIRO**—A new unit of value adopted in Brazil in 1942.
- CUARTILLA**—A Central and South American silver quarter-real.
- CUNEATOR**—The mint official responsible for the accuracy of the dies.
- CUNNETTI**—Applied to a series of Anglo-Saxon pennies, chiefly of York, with that legend.
- CUT DOLLAR**—The name given to the segments of a Spanish dollar when divided for circulation in the West Indies.

D

- DAALDER**—The equivalent of the Taler in the Netherlands.
- DALA**—A silver coin of Hawaii, 1883.
- DALER**—The Scandinavian equivalent of the Taler.
- DAM**—A small Indian copper coin, from which the expression "Not worth a damn" is really derived.
- DANARO**—The Italian equivalent of the French denier.
- DANEGELD**—The name given to the annual tax levied by the Viking invaders.
- DARIC**—A Persian gold coin probably first issued under Darius I (521-485 B.C.).
- DECADRACHM**—A 10-drachm piece, struck in Agrigentum, Syracuse, Athens, Carthage and Egypt in Ancient Greece.
- DECIME**—A 10-centime piece of France and Switzerland.
- DECIMO**—A 10-centavo piece of several Central American states.
- DEMARATEION**—A Syracusan 10-drachm piece struck at Syracuse about 480 B.C. to celebrate the victory of Gelon over the Carthaginians at Himera. It derives its name from his wife, Demarete, who, it is said, interceded to obtain more favourable terms from her husband and was presented by the Carthaginians with a gift of treasure, some of which was converted into these coins.

APPENDIX A

DEMY—A Scottish gold coin of Robert III (1390-1406) and his successors James I and II.

DENAR—The German equivalent of the denarius and the denier.

DENARIUS—A Roman silver coin first issued in 269 B.C. and continued with various changes until Diocletian's reform in A.D. 301 when the miliarensis was introduced.

DENGA—A small Russian silver coin struck by the Grand Dukes of Moscow, the Princes of Kiew, and the early Czars, as well as some independent cities.

DENIER—A French silver coin, derived from the Roman denarius, first introduced by Charlemagne and eventually current throughout Western Europe. The denar, danaro, dinero and penny are all equivalents of the same coin. It was later debased, and finally became a copper coin.

DICKEN—A Swiss silver coin of the fifteenth and sixteenth centuries, roughly corresponding to the Italian testone.

DIDRACHM—A Greek silver coin of two drachms, frequently also called a stater.

DIE—The stamp or metal plate used in coining.

DIME—A United States 10-cent piece.

DINAR—A Muhammadan gold coin.

DINAR—A gold coin of the Hejaz, issued in 1933.

DINAR—A Serbian silver coin equivalent to the French franc. Also the unit of value in Yugoslavia since 1921.

DINERO—The Spanish equivalent of the denier.

DINHEIRO—The Portuguese equivalent of the denier.

DIOL—A Greek silver coin of two obols.

DIZAIN—A French billon coin first issued under Louis XII (1498-1515).

DOBLA—A gold coin of Spain of the fourteenth century.

DOBLA—A term generally used for the gold double ducat of Charles V for Naples.

DOBLON—A gold coin of Uruguay.

DOBLONE—A gold coin of four scudi struck in Bologna and Rome. Also a gold coin of eight scudi issued by Francis I of Modena (1629-37).

DOBRA—A Portuguese gold coin.

DOBRA GENTIL—A Portuguese gold coin issued in the reign of Fernando I (1367-83).

DODECADRACHM—A Greek coin of twelve drachms struck at Carthage.

DODKO—A copper coin of Junagadh and Kutch, 1907-9.

- DOIT**—The English equivalent for the Dutch Duit.
- DOLLAR**—The English equivalent of the German Taler, the unit of value in the U.S.A. and Canada. It has also been struck in England and Ireland under George III, in Scotland under James VI and Charles II. In the Far East there are the British, Hongkong and Straits Settlements dollars. The name is often loosely applied to the Spanish and Latin-American 8-reales or peso.
- DONG**—An aluminium coin of Viet-Nam (Indo-China), issued in 1946.
- DOPPIA**—An Italian gold coin of two scudi.
- DOUBLE**—An abbreviation for the French 2-deniers. There is also an Anglo-Gallic coin of that name in Edward III's reign, and a Scottish double-groat or double of Edward IV.
- DOUBLE**—A copper coin of Guernsey.
- DOUBLOON**—A name commonly used for the Mexican and Spanish-American 8-escudos or onza.
- DOUDOU**—A copper coin of Southern India, also struck in the French colony of Pondicherry.
- DOUZAIN**—A French billon coin, first introduced under Charles VIII (1483-98).
- DRACHM**—The unit of the silver coinage of Greece.
- DRACHMA**—The unit of the silver coinage of modern Greece, the equivalent of the silver franc.
- DREILING**—A small coin of some of the North German states.
- DUCAT**—A gold coin which won wide acceptance in Europe. It seems to have originated in Sicily about 1150, and was usually struck in fine gold. Its only appearance in the British coinage has been in Scotland soon after the marriage of Mary, Queen of Scots, to Francis, the French Dauphin.
- DUCATO**—The Italian equivalent of the ducat.
- DUCATOON**—A silver coin of the Netherlands first struck in 1598.
- DUCATONE**—The Italian equivalent of the ducatoon, issued in Savoy, Milan and other states.
- DUIT**—A small copper coin issued in the Netherlands, and later for her colonies in Ceylon and Java.
- DUKAT**—The German equivalent of the ducat.
- DUMP**—A term applied to thick coins, especially to the coins of Ceylon and the halfpenny and farthing of George I, 1718.
- DUPLONE**—A gold coin of some of the Swiss cantons.
- DUPONDIIUS**—A Roman brass coin, a multiple of the as.

DURO—A Spanish coin of the value of eight reales, the equivalent of the Spanish-American peso.

E

EAGLE—The United States of America 10-dollar piece.

ECU—A French silver coin first struck under Louis XIII in 1641.

ECU D'OR—A gold coin of France first issued under Philip VI (1328-50).

It was also struck in Scotland in 1525 and 1543. The name often appears in combination with other terms to distinguish certain characteristics of the ecu, such as *ecu au soleil*, *ecu au pore-épic*, *ecu à la couronne*.

ELECTRUM—A natural alloy of gold and silver used for the earliest Greek coins struck, and later for many Greek issues, such as those of Cyzicus, some Syracusan and Carthaginian pieces, and the late Byzantine coinage.

ENCASED STAMPS—A term applied to some early U.S. fractional currency on which postage stamps were represented.

ENGENHOSO—A gold coin of Portugal first struck in 1562.

ENGRAILED—A term used to describe the edge of a coin when this is formed by a ring of dots or curved lines.

ENRIQUE—A Spanish gold coin first struck by Enrique IV (1454-74).

ESCALIN—A Dutch silver coin from the end of the sixteenth century.

ESCUDO—A Portuguese silver coin introduced by the Republic in 1911.

ESCUDO—A Spanish gold coin first issued early in the sixteenth century. It became the unit of the gold coinage both in Spain and in Spanish-America.

E SEN—Japanese tokens or charms, usually with types rather than inscriptions, but similar in size to the copper coins then circulating.

ESPADIM—A Portuguese gold coin first struck by D. Joas II (1481-95).

ESPHERA—A gold coin struck at Goa in 1509-15.

ESTERLIN—A corruption of sterling and applied to the imitations of the Edward I penny issued by many Western European states.

EXCELENTE—A Spanish gold coin first issued under Ferdinand and Isabella (1494-1515).

EXERGUE—The lower part of the reverse of a coin, usually separated from the main type by a line.

EYRIR—(plural *Aurar*)—A bronze coin of Iceland, 1926-46.

F

- FALCONER**—Refers to the Scottish coinage of Charles I designed by John Falconer, son-in-law of Nicholas Briot.
- FALUS**—A South Indian copper coin; also issued in Morocco in the second half of the nineteenth century.
- FANAM**—A South Indian coin issued both in gold and silver. Denmark also issued a 5-fanams for Tranquebar, and France a fanam for Pondicherry.
- FARTHING**—Meaning quarter, as the early pennies could be cut into halves and quarters. Silver farthings were first struck under Edward I; copper ones, the "Harrington" and "Lennox" farthings, under James I; tin ones under Charles II, when the regular issue of copper farthings began. Under James II and William and Mary tin farthings with a copper plug were also struck. Half- and quarter-farthings were struck under Victoria for Ceylon; third-farthings for Malta from 1827 to 1911.
- FEN**—A bronze coin of Manchukuo, 1933-4.
- FERDING**—A Swedish silver coin of the sixteenth century and later.
- FILIPPO**—The silver scudo for Milan struck by Philip II of Spain and his successors.
- FILLER**—A Hungarian copper coin first struck in 1892.
- FILS**—The unit of value in Iraq since 1921. Also a bronze coin of Jordan, 1949.
- FIND**—A term applied to a hoard of coins discovered in the ground.
- FISH-HOOK MONEY**—A primitive currency formed by a piece of wire, usually silver, in the shape of a fish-hook and called a *larin*. Originating in Persia, it is more generally found in Ceylon and Bijapur.
- FLABBE**—A Dutch billon coin from the fifteenth century.
- FLAN**—The blank piece of metal ready for striking.
- FLEUR DE COIN**—The French equivalent of mint condition.
- FLOREITE**—A variety of the gros, struck both by Charles VI of France (1380-1422) and by Henry V in the Anglo-Gallic series.
- FLORIN**—Originally the gold coin of Florence, first coined in 1252. As with the ducat, it spread widely throughout Europe, and was imitated by many states. A florin was issued by Edward III in 1344 but was not a success and withdrawn almost immediately.
- FLORIN**—Concurrently with the gold florin, a silver one was issued in Florence at one-tenth of the value of the former. The term is also

applied to the Dutch Gulden, and to some German and Austrian issues. In England the florin or two-shilling piece was introduced in 1849 at the time when a decimal coinage was being discussed, it being a tenth of a pound.

FOLLARO—A Southern Italian copper coin of about the tenth until the fifteenth century.

FOLLIS—A copper denomination first struck under Constantine the Great. The name was also applied to the 40-nummi in the Byzantine series.

FORINT—A Hungarian silver coin, struck in 1946 after the reform of the currency.

FRACTIONAL CURRENCY—U.S. bank-notes, ranging in denomination from three to fifty cents.

FRANC—A French silver coin created by Henri III in 1575, but superseded by the ecu in 1641. The term was revived by Napoleon in 1803 and the franc was later adopted by Belgium, Switzerland, Luxemburg, Monaco, and in some of the French colonies. In 1904 the franc was introduced into the monetary system of the Danish West Indies.

FRANC À CHEVAL—A French gold coin first issued under Jean II (1350-64).

FRANC À PIED—A French gold coin introduced by Charles V (1364-80) and copied by other states.

FRANCESCONE—A silver coin of scudo size struck in Tuscany in the eighteenth century.

FRANCO—A Dominican Republic silver coin.

FRANK—The German equivalent of franc; chiefly used in Belgium, Switzerland and the issues of Jerome Napoleon for Westphalia; also in Liechteustein after 1924.

FRANKA—The Albanian equivalent of the franc, first struck in 1926.

FREDERICK D'OR—A Danish gold coin issued in 1827.

FRIEDRICHSOR—A Prussian gold coin first issued under Frederick the Great.

FUANG—A Siamese gold coin.

FUN—A Korean denomination.

FUNDUK—A Turkish gold coin issued in the early sixteenth century.

FYRK—A copper coin of Sweden, first issued under Gustavus I about 1522.

G

- GAZZETTA—A Venetian copper coin.
- GENEVOISE—A silver coin of Geneva issued in 1794.
- GENOVINO—A gold coin of Genoa first struck in the twelfth century.
- GEORGE NOBLE—A gold coin of Henry VIII of his second coinage, with St. George and the Dragon on the obverse.
- GIGLIATO—A silver coin first issued by Charles II of Anjou for Naples (1285-1309).
- GIRSH—A cupro-nickel coin of Saudi Arabia, first issued in 1926.
- GIULIO—A Papal silver coin, first called by this name in the time of Julius II (1503-13).
- GIUSTINA—A Venetian silver coin, deriving its name from the type which shows St. Giustina, first struck about 1571.
- GO—Japanese for five.
- GODLESS FLORIN—A term applied to the florin of 1849 which omitted the letters D.G. (Dei Gratia) from the legend.
- GOLD—The normal standard of value.
- GOTHIC CROWN—The crown of Victoria of 1847 and 1853 with Gothic lettering.
- GOURDE—A silver coin of Haiti.
- GRAMO—A denomination found on a private issue of gold coins by Julius Popper at Tierra del Fuego (South America).
- GRANO—A small copper coin originally of Naples, and later of Malta. The third-farthing was struck to take the place of the Maltese grano.
- GRIVNA—A Russian base-silver coin of ten kopecks.
- GROAT—The equivalent of the French gros. The first English groat was struck under Edward I, but it did not come into general circulation until Edward III's reign. In Scotland David II (1329-71) introduced the groat, and Henry VI, during his first reign, in Ireland.
- GROS—Originated in Bohemia under Wenceslaus II (1278-1305) and was rapidly copied by other states.
- GROS TOURNOIS—A French silver coin of the value of twelve deniers, first issued by Louis IX in 1266 and so-called because of its type—a castle gate and the legend TVRONVS CIVIS derived from the denier first issued at Tours.
- GROSSO—An Italian silver coin, equivalent of the gros.
- GROSSONE—An Italian silver coin issued at Pisa, Mantua, the Two Sicilies and Venice.

APPENDIX A

GROSZ—The Polish equivalent of the gros.

GUERCHE—An Abyssinian silver coin issued under Menelik.

GUIENNOIS—An Anglo-Gallic gold issue of Edward III and Edward, the Black Prince.

GUILDER—The English term for the Dutch Gulden, first issued in Friesland about 1600. In Essequibo and Demerara, now British Guiana, the guilder was struck by George III in 1816.

GUINEA—An English gold coin first struck under Charles II in 1663 when the mill coinage was introduced. It was originally worth twenty shillings and derived its name from the Guinea Coast, as the African Company was encouraged to bring over gold from there. Its value fluctuated, being as high as £1 8s. in William III's reign, but in 1717 the guinea was reduced to 21s., a value it retained until it was discontinued after 1813.

GULDEN—A German gold coin of the size of the ducat but of a lower standard. Usually referred to as "Goldgulden."

GULDEN—A German silver coin, normally two-thirds of the Taler.

GULDEN—A Dutch silver coin (see Guilder). The unit of value in the Netherlands since 1795.

GULDEN—A silver coin of the Free City of Danzig, first struck in 1923.

GUN MONEY—The term applied to an issue of money of necessity by James II for Ireland in 1689-91, as it was struck principally from metal obtained by melting old cannon.

H

HALERU—The hundredth part of the Czechoslovakian korona.

HALFPENNY—First struck as an independent coin under Edward I.

HAMMERED COINS—A term used to differentiate coinage struck by hand from that struck by the use of the mill and screw.

HAO—An aluminium coin of five hao was struck in Viet-Nam (Indo-China) in 1946.

HARDHEAD—A Scottish billon coin, also called a lion, first struck by Mary Stuart about 1555-8. Originally worth 1½d., its value was raised to 2d. by James VI.

HARDI D'ARGENT—An Anglo-Gallic silver coin first issued by Edward, the Black Prince, and continued by Richard II and Henry IV.

HARDI D'OR—A similar Anglo-Gallic issue, but in gold.

HARRINGTON FARTHING—So called from the patent granted by James I in 1613 to Lord Harrington to strike royal token coins of the nominal value of one farthing.

APPENDIX A

- HAT MONEY**—A tin coin struck for the Malay Peninsula in shape rather like a square hat.
- HAT PIECE**—A Scottish gold coin of James VI issued in 1591-4, and so called because the King wears a high-crowned hat.
- HEAUME**—Old French term for a helmet. Louis de Male (1346-84) struck a heaume d'or and a lion heaumé, on both of which a lion, or lions, are shown supporting a helmet.
- HECTE**—A Greek coin of the value of one-sixth of a stater. Struck both in gold and electrum, the issues of Phocæa and Mytilene depict an attractive series of type.
- HELLER**—A billon coin chiefly issued in Southern Germany, Switzerland and later in Austria. It was also used in German East Africa as the subsidiary of the rupie.
- HEMIDRACHM**—The half of a drachm in the Greek coinage.
- HEMIHECTE**—The half of the hecte; coined in Cyrenaica in gold, in Asia Minor in electrum.
- HEMIOBOL**—The half-obol, one-twelfth of a drachm. It occurs chiefly in the Athenian coinage.
- HEMITARTEMORION**—A tiny Athenian silver coin, one-eighth of the obol.
- HENRI D'OR**—A French gold coin struck by Henri II in 1549.
- HOG MONEY**—The popular name for an issue of coins in Bermuda (then called Sommer Islands) between 1616 and 1624, with a hog as the main type.
- HOLEY DOLLAR**—A popular name for the issue of Spanish dollars with the centre cut out in New South Wales in 1813. The value of five shillings was stamped on them, and the centre-piece, called a dump, was stamped fifteen pence.
- HVID**—A Danish silver coin of the sixteenth century valued at four Pfennige.
- HYBRID COINS**—A name given to a coin with a mixture of types as between two series. Also called mules.

I

- ICHI BU**—One bu—a Japanese coin.
- IKILIK**—A silver denomination of Turkey.
- ILAHİ**—A new era introduced by Akbar, Moghul Emperor, and used in dating his coinage. Ilahi 1 = A.H. 964 = A.D. 1556.
- IMADI**—A silver coin of the Yemen, first struck in 1924.
- IMPERIAL**—The Russian gold 10-rouble piece.

APPENDIX A

INCHQUIN MONEY—An issue of silver money of necessity in Ireland in 1642 by Lord Inchiquin, Vice-President of Munster. His name is sometimes spelt Inchquin.

INCUSE—Indicates that the same type was used for both obverse and reverse of a coin, but on one side the design is concave, on the other convex. In Greek times these coins were issued in Magna Græcia (Italy) at Tarentum, Metapontum, Sybaris, etc. When this occurs in modern times through a mis-strike, the usual term is brockage.

INITIAL MARK—The cross or other symbol placed at the beginning of the legend to denote date or place of issue or some such differentiation. Often called mint mark (*q.v.*).

J

JETTON—A counter used with a casting-board in early accounts. Some of them seem to have circulated as coins.

JOE—The common designation for the Portuguese gold *peça* first issued under Joao V in 1722.

JUGATE—An obsolescent term for conjoined = placed side by side.

K

KAPANG (also spelt *Kepeng*, *Keping* or *Kupang*)—A copper coin used in the Malay States.

KAS—A Danish copper coin issued for Tranquebar from Christian V (1670-99) to 1845.

KILKENNY MONEY—An issue of halfpenny and farthing by the Confederate Catholics at Kilkenny in 1642.

KIPPERMÜNZEN—A name given to clipped German coins in the seventeenth century and also applied to a debased coinage issued about 1620.

KLIPPE—The German term for a square or rectangular coin.

KNIFE MONEY—An early Chinese copper coin in the shape of a knife.

KOBAN—A Japanese oval gold coin, one-tenth of the oban (*q.v.*).

KORI—A small silver coin current in India native states in Kutch and Kathiawar.

KORONA—The Hungarian equivalent of the Austrian Krona.

KORONA—The unit of value of Czechoslovakia, first struck in 1922.

KRAN—A silver Persian coin introduced by Fath Ali Shah in 1826.

APPENDIX A

KREUTZER—A small silver coin originating in the Tyrol about the thirteenth century. It eventually became a copper coin and circulated extensively in Austria, Hungary, Southern Germany and Switzerland. Sometimes spelt Kreuzer.

KRONE—A silver coin of Norway, Sweden, Denmark, Iceland and Greenland. Adopted in 1875 by the three kingdoms as their monetary unit, it is spelt Krona in Sweden.

KRONE—A silver denomination of Austria adopted in 1892.

KROON—A silver coin of Estonia, first struck in 1933.

KURUS—A unit of value in Turkey introduced in 1933. The kurus is the hundredth part of the lira or pound.

L

LANDESMÜNZE (also *Landmünze*)—The name given to German base-silver or copper coins restricted as to circulation within the province or state where issued. Often abbreviated to L.M.

LARI—A copper coin of the Maldive Islands first issued in 1922.

LARIN (also *Fish-hook money*)—A bent-wire currency, usually silver, in the form of a hook originating in Laristan in the Persian Gulf. These spread to Ceylon and the Maldive Islands.

LAT—A copper or base-silver ingot or bar used in Northern Siam.

LATS—A Silver coin of Latvia, first struck in 1924.

LAUREL—An English gold coin of James I, equivalent to the unite, but so called on account of his laureate head.

LEAD—This metal has not been used much for coins. Lead doits for Ceylon in 1789-93 and lead cash for Negapatnam were issued by the Dutch. A few issues for Tranquebar under Frederick III were made, and a set of siege coins of Woerden in 1575-6 also exist.

LEATHER MONEY—According to some early writers, leather money was issued in Greek and Roman times, but specimens do not appear to have survived. The same is also maintained regarding issues in Venice in 1122, Milan in 1237 and Parma in 1248. At the siege of Leyden in 1573-4 some leather money was issued, but appears to have been eaten by the starving inhabitants. Russia also issued some kind of coupons which may have served as currency. There are also some English seventeenth-century tokens struck on leather.

LEGEND—The words or letters on a coin.

LEK—Originally a nickel coin of Albania; later struck in silver to equal the Italian lina.

APPENDIX A

- LEMPIRA—A silver coin of Honduras, first struck in 1931.
- LEOPARD—An Anglo-Gallic gold coin struck by Edward III in 1344.
- LEPTON—The smallest Greek copper coin such as that issued in Athens about 400 B.C. The term is used in the New Testament and translated as mite. The name is still retained in the modern Greek coinage.
- LEU—A Roumanian silver coin.
- LEVA—A Bulgarian silver coin.
- LEVANT DOLLAR—The name is usually applied to the Maria Theresa Taler of 1780 which circulated widely in the Levant and is still the currency of Abyssinia and vicinity. A Levant Taler was issued by Frederick the Great of Prussia in 1766 and 1767.
- LI—A bronze coin of Manchukuo first struck in 1933. Ten li = 1 fen.
- LIARD—A French base-silver coin.
- LIBRA—The unit of the gold standard of Peru, adopted in 1897 and equivalent to the sovereign.
- LION—A Scottish gold coin first issued under Robert III (1390-1406). The term is also sometimes applied to the Scottish hardhead (*q.v.*).
- LIRA—First issued in Venice in 1471-3 it became the Italian equivalent of the franc when Italy joined the Latin Union.
- LIS D'ARGENT—A French silver coin struck by Louis XIV in 1656.
- LITAS (plural Litai)—A silver coin of Lithuania, first struck in 1925.
- LITRA—Originally a Sicilian bronze coin, it was later struck in silver, and multiples in gold were issued in Syracuse.
- LIVRE—Originally a money of account in France. As a coin it first appears as a 20-sols piece of Louis XV in 1720 for the Compagnie des Indes; it then was issued by Louis XVI as a gold 24-livres, and silver 6- and 3-livres, followed by the Republican issues of 1793 in the same denominations. It was finally abolished in 1803 when the franc system was introduced.
- LONG-CROSS TYPE—The name given to the penny first issued by Henry III in 1248, as it had a long cross extending to the border instead of the previous short cross.
- LOUIS D'ARGENT—Struck by Louis XIII in 1642 and 1643 in two denominations—Louis d'argent de 60 sols (ecu) and de 30 sols (half-ecu).
- LOUIS D'OR—A French gold coin of Louis XIII adopted in 1640 and continued until the Revolution. By analogy the gold 20-franc piece is often called a Louis.

APPENDIX A

LUIGINO—A silver coin of Genoa of the seventeenth century, also issued in other small states of Northern Italy.

M

MACE—A Chinese monetary unit, the tenth part of a tael.

MACUTA—A Portuguese copper coin issued for Angola and other Portuguese African colonies.

MAILLE—A small French billon coin first struck under Philip IV (1285-1314). There are a number of variants, such as *maille tournois*, *maille blanche*, *maille noire*, etc.

MAME GIN—A Japanese oval lump of base silver, sometimes called bean money.

MANCUS—An Anglo-Saxon money of account, supposedly equal to thirty pence. The name occurs in connection with the annual tribute paid to the Pope, also referred to as "Peter's Pence." The name has also been given to the gold dinar of Offa now in the British Museum.

MANILLA—A form of ring money much in use as currency on the West Coast of Africa.

MARAVEDI—A Spanish copper coin first struck under Ferdinand and Isabella (1494-1515). It became the unit of the copper coinage.

MARENGO (also *Marengghino*)—A gold 20-franc coin struck at Turin in 1801 and 1802 (Year 9 and 10 of the Revolution) to commemorate the Battle of Marengo.

MARIA THERESA TALER—Another name for the Levant Taler (*q.v.*).

MARK (also *Marc*)—A money of account much used in computing large sums in the Middle Ages.

MARK—The unit of currency in modern Germany.

MARK—A Scandinavian denomination of the sixteenth century which spread to some of the North German states.

MARKKAA—A silver coin of Finland first issued in 1865.

MAS—A small gold coin of the former kingdom of Atjeh (Sumatra).

MASSE D'OR—A French gold coin struck under Philip III and Philip IV (1270-1314).

MATAPAN—A name given to the Venetian grosso struck between the late twelfth and the fifteenth centuries.

MAUNDY MONEY—Since very early times the custom of washing the feet of certain poor persons on Maundy Thursday, the day before Good Friday, has been observed in England, and was usually accompanied by gifts of clothing, food and money. No special

coins were struck until Charles II, when a set of 4d., 3d., 2d. and 1d. in silver was issued. This has been continued until the present day and these coins are called Maundy Money or the Royal Maundy.

MAZUNA—A bronze coin of Morocco, first struck in 1903.

MEDAL—A piece struck to commemorate a particular event or person, or as an award for distinguished conduct.

MEDALET—A small medal.

MEDALLION—A large medal. The term is also used for large pieces in the Roman series which may or may not have circulated as money.

MÉREAU—Originally a French moneyer's pass, the name was eventually used for passes or counters identifying members of certain councils or commissions.

MERK—A Scottish silver denomination in the reign of James VI.

MEXICAN DOLLAR—A popular name for the Mexican and South American peso, especially in the Far Eastern trade.

MIL—Small copper coin of Hong Kong, one-tenth of a cent.

MIL—A bronze coin of Palestine, 1927-46.

MILIARENSIS—A silver coin, the equivalent of two siliquæ, issued in or about A.D. 248 by Constans and Constantius II.

MILL COINAGE—The name given to coins struck by the employment of the mill and screw. In the English series such coins were struck under Elizabeth between 1561 and 1572, under Charles I by Briot, and under the Commonwealth for portrait pieces of Cromwell. It finally came into regular use under Charles II in 1662. The term "milled coinage" or "milled money" is a misnomer.

MILLIÈME—A modern Egyptian nickel coin.

MILL SAIL TYPE—On early Greek coins the punches used for the reverse often produced a design not unlike the sails of a windmill, hence the name for this particular pattern.

MILREIS—One thousand reis. A Portuguese and Brazilian coin, as well as a money of account.

MINT CONDITION—As the term implies, it indicates a coin in the same bright and perfect state as when issued by the mint. Equivalents are *Fleur de Coin* (F.D.C.) and *Uncirculated* (Unc.).

MINT MARKS—This term used to be applied indiscriminately to symbols or letters to indicate date or place of striking whenever found on a coin. It is usual now to call them "initial marks" when they occur at the beginning of the legend, and "mint marks" when in the field or in the exergue.

APPENDIX A

MISCAL—More correctly *Mithqal*. A Persian unit of weight for bullion. In Chinese Turkestan the mace is sometimes called a miscal.

MOCENIGO (also *Lira Mocenigo*)—A silver coin of Venice introduced by Pietro Mocenigo (1474-6).

MOCO—The centre-bit from a Spanish dollar, used in Dominica and Guadeloupe.

MODULE—The size of a coin.

MOHAR—A denomination used in the Nepalese coin system.

MOHUR—More correctly *Muhr*. A gold coin of India first issued by the Moghul Emperor Akbar and continued by the East India Company. It was only discontinued in 1899.

MOIDORE—A corruption of the Portuguese *moeda d'oro* = gold coin.

MONEY OF ACCOUNT—A term used to describe a unit of value which was not necessarily struck as a coin. Examples are: the modern use of a guinea as a price, the Portuguese conto = 1,000 escudos, the Indian lac = 100,000 rupees.

MONEY OF NECESSITY—Synonymous with obsidional coins.

MORABITINO—An early gold coin of Portugal struck in the reigns of Sancho I (1185-1211) and Alfonso II (1211-23).

MOUTON (also *Mouton d'or*)—A French gold coin first issued by Jean II in 1355 to take the place of the agnel. It was larger and heavier. It ceased with Charles VII in 1423.

MULE—The term used to describe a coin made from dies not originally intended to be so coupled.

MUNG—A copper coin of Mongolia, struck in 1925.

N

NAPOLEON—A popular name for the French gold 20-francs, whether struck by Napoleon or not.

NEW ENGLAND SHILLING—The earliest coin issued in the Colony of Massachusetts in 1652.

NEW JERSEY CENTS—Copper cents issued by the State of New Jersey between 1786 and 1788.

NI BU—Japanese for two bu.

NICKEL—A metal much used for subsidiary coinage in modern times, either pure as in Canada, or alloyed with copper as in Switzerland.

NISAR—Any coin struck for presentation purposes in India or Persia.

NOBLE—A gold coin first issued by Edward III in 1344, and the first regular English gold piece. Its value was 6s. 8d.

APPENDIX A

- NOMISMA**—Apart from its use in Greece as the generic term for money, the late Roman scyphate coins are thus designated.
- NOMMOS**—A term used as the equivalent of the stater or didrachm in the coinage of Southern Italy.
- NORTHUMBERLAND SHILLING**—The shilling of George III of 1763 is so called as it was distributed by the Earl of Northumberland on his entry into Dublin as Lord Lieutenant of Ireland.
- NUMMUS**—The Latin generic term for money.

O

- OAK-TREE COINS**—Early silver coins of Massachusetts dated 1652 and having an oak tree as main type.
- OBAN**—A large oval Japanese gold coin, first issued in the period 1573-92 and discontinued in 1860. They were chiefly presentation pieces.
- OBOL**—A Greek silver coin, one-sixth of a drachm.
- OBOLÉ**—A name usually applied to the half-denier.
- OBSIDIONAL COINS**—As the name implies, these are siege coins, but the term is used loosely to cover money of necessity as well. Of various shapes and sizes according to the exigencies of the period, they were struck locally and served when the regular coinage was impossible to obtain.
- OBVERSE**—The more important side of a coin—the head side. It is usual in recent works on Greek coins to classify the anvil die as the obverse and the punch die as the reverse.
- OCTADRACHM**—Eight drachms. Examples in silver are the issues of Macedon, Thrace, Phœnicia and Egypt. In gold, the denomination occurs in the Ptolemaic coinage of Egypt.
- OCTAVO**—A copper coin of Mexico.
- ONCIA**—A gold coin of Palermo in Sicily in the eighteenth century.
- ONZA** (also *Onça*)—A name given to the gold 8-escudos of Spain and Latin-America.
- ORE**—A Scandinavian denomination originally in silver, later in copper. It is still the unit of value for the subdivisions of the Krone.
- ORICHALCUM**—A yellow brass, composed of a mixture of copper and zinc, used for some of the Roman sestertii and dupondii.
- ORMONDE MONEY**—A series of emergency coins issued in Ireland in 1643 by the Viceroy, the Marquis of Ormonde.
- ORTUG**—An early Scandinavian silver coin.

APPENDIX A

- OSELLA**—A Venetian silver coin to take the place of the ducks which the Doge used to present to the members of the Council of the Republic on New Year's Day. It was first struck in 1522 and discontinued in 1797. A few were struck in gold.
- OVERSTRIKE**—A term used to describe a coin which bears beneath its type the remains of an earlier piece used as a blank.
- OWLS**—The popular Greek name for the Athenian tetradrachm with an owl on the reverse.
- OXFORD CROWN**—A celebrated crown of Charles I made by Thomas Rawlins in 1644 showing a view of Oxford between the legs of the King's horse.

P

- PADMA TANKA**—A gold coin of Southern India of uncertain date, slightly concave, with a lotus flower as main type.
- PADUANS**—A name given to a series of Italian Renaissance imitations of Roman sestertii, some of which are by well-known artists, such as Cavino and Bassiano of Padua.
- PAGODA**—A small gold coin of Southern India, somewhat globular in shape, with a representation of a Hindu deity. This type was also struck by the East India Company, by the French for Pondicherry, and by the Dutch for Negapatnam with small distinguishing marks.
- PAHLEVI**—A new unit of value for gold coins of Persia, first issued in 1927.
- PAISA**—A copper coin of India, from which the modern name pice is derived.
- PAOLO**—A Papal silver coin originating under Paul III (1534-50) to replace the older giulio.
- PARA**—A modern Turkish copper or nickel coin based on an earlier silver piece.
- PARDAO** (also *Pardau*)—A Portuguese silver coin for the Indies, chiefly of Goa. First issued under John V (1706-50), it was the half of the rupia.
- PARISIS D'OR**—A French gold coin first issued by Philip VI in 1323.
- PARPAGLIOLA**—An Italian base-silver coin of the fifteenth and sixteenth centuries. It also occurs in Switzerland, more especially in the western cantons (Parpaiolle).
- PATAC**—A French billon coin issued for Perpignan in the reign of Louis XI (1461-83).

APPENDIX A

- PATACA**—A Brazilian silver coin, value 320 reis.
- PATARD**—A Flemish silver coin of the fifteenth century.
- PATTERN**—As the name implies, refers to a design submitted for a new coinage. Pattern coins are trial pieces which were not accepted for coinage. Unofficial pattern is the name given to such pieces produced privately.
- PAVILLON D'OR**—A French gold coin issued by Philip VI (1328-50). The type was copied by Edward the Black Prince in the Anglo-Gallic series.
- PAX TYPE**—One of the types of the penny of William I, from the letters PAXS in the angles of the cross.
- PEÇA** (also spelt *Peza*)—A Portuguese gold coin of 6,400 reis first issued under John V in 1722. The correct name for it is *dobra de quatro escudos*, and it was struck in Brazil as well as Portugal.
- PENGO**—A silver coin of Hungary, first struck in 1926.
- PENNY**—The English equivalent of the French denier. It originally was a silver coin introduced by Offa, King of Mercia (757-96), to take the place of the debased sceat, and has continued as a silver coin to the present day through the Maundy coins. As a copper coin it was first introduced by George III in 1797. The penny has also been issued in many of the British Dominions and possessions.
- PENTADRACHM**—A Greek gold coin of five drachms, issued by Ptolemy I (323-284 B.C.), Ptolemy II (284-247 B.C.) and Ptolemy III (246-221 B.C.) in Egypt.
- PENTECONTALITRA**—Equals fifty litra. The Sicilian name for the dekadrachm.
- PERKIN WARBECK GROAT**—The name given to a curious piece dated 1494 which is reputed to have been struck for Perkin Warbeck's insurrection.
- PERPER**—The standard of value in Montenegro, equivalent to the Austrian Krone.
- PESETA**—The monetary unit of Spain, adopted to comply with the requirements of the Latin Union in 1868.
- PESO**—The name given to the Spanish 8-reales when struck in Latin-America.
- PETER'S PENCE**—The annual payment made to the Pope in mediæval times.
- PETITION CROWN**—A pattern crown of 1663 designed by Thomas Simon in competition with John Roettiers, on the edge of which is a petition to the King asking for reinstatement. (Simon was in

APPENDIX A

disgrace for having been employed at the Mint by the Commonwealth.) The workmanship is excellent, but the petition was not granted.

PFENNIG—The German equivalent of the penny. It—like the penny—still exists today.

PIASTRE—The Turkish unit of value, used also in Egypt as well as in Cyprus. Since 1921 also the unit of value of Lebanon.

PIASTRE DE COMMERCE—A French Indo-China denomination.

PICCIOLO—A small copper coin current in Malta and the Two Sicilies from about the sixteenth century.

PICE—A copper coin of the East India Company, still retained in the Indian monetary system.

PIE—A small Indian copper coin, one-third of a pice.

PIECE OF EIGHT—A popular name for the Spanish and Latin-American 8-reales.

PIÈCETTE—A billon coin of the Swiss cantons of Fribourg and Neuchatel in the eighteenth century.

PIÉFORT (also *Piedfort*)—A name given to a coin struck on a blank of more than normal thickness for the coin. Normally used for pattern coins rather than for coins issued for circulation.

PIERCED—A coin with a hole in it, whether part of the design or made later for purposes of suspension.

PILLAR DOLLAR—A popular name for the early Latin-American 8-reales showing two globes between the Pillars of Hercules.

PINE TREE COINS—An early silver issue of Massachusetts dated 1652 with a pine tree as the main type.

PISTAREEN—A name given chiefly in the West Indies to the Spanish 2-reales piece.

PISTOLE—A gold coin mainly issued in some Swiss cantons and in Northern Germany.

PISTOLE—A Scottish gold coin of William II issued in 1701. In weight it approximates to the guinea; it was struck from gold sent over from the colony of Darien in a ship called the *Rising Sun*, hence the sun rising from the sea below the King's bust.

PISTOLET—A small pistole issued in Geneva from about 1562 to 1585. It is also called *ecu pistolet*.

PLACK—A Scottish billon coin first struck under James III (1460-88) and continued until James VI.

PLAQUETTE—The name given to a uniface medal of square or rectangular form.

- PLATED COINS**—A name given to some official Roman issues which consist of a base-metal core silver plated. They were issued chiefly in the first century B.C. until Augustus reformed the coinage in 15 B.C. The term *subarati* is sometimes used to describe these.
- PLATE MONEY**—An extensive issue of Swedish copper coins in the form of large square or rectangular pieces. They must be considered as money of necessity issued during the seventeenth and eighteenth centuries when Sweden was short of silver.
- PLATINUM**—This metal has only been used in Russia for a regular coinage of 3-, 6- and 12-roubles from 1828 to 1845. Some other platinum pieces exist, such as the sovereign, 20-francs, Spanish 80-reales of Isabella, etc., but these are usually gilt and must either be forgeries or some kind of semi-official issue.
- POINTS SECRETS**—A term used in the French series referring to the practice of indicating the mint town on certain coins by a dot under the letter of the legend corresponding to the number allotted to that town.
- POLTINA**—The Russian silver half-rouble.
- POND**—The South African equivalent of the pound.
- PORCELAIN TOKENS**—Usually refers to an extensive series of Siamese pieces, possibly issued as gaming counters, but with denominations inscribed on them.
- PORTCULLIS COINS**—This term refers to the issue of a coinage struck by Elizabeth in 1600-1 for the use of the East India Company.
- PORTUGALOSER** (sometimes *Portugaleser*)—A large 10-ducats gold piece originally copied from the *Portuguez*, and issued chiefly in Hamburg. It eventually degenerated into a medallic coin though the weight was maintained.
- PORTUGUEZ**—A large Portuguese gold coin struck by Manoel I (1495-1521) and John III (1521-57).
- POTIN**—A base metal composed of lead, copper, tin, zinc and silver. The term has been largely superseded by *billon*, though it is sometimes used to describe the metal of the Alexandrian base tetradrachms, and some issues of Carthage.
- POUND SOVEREIGN**—A term used to distinguish the sovereign of twenty shillings of Elizabeth's reign (with her bust to left) from the fine sovereign of thirty shillings showing her seated facing on a throne.
- PROCLAMATION PIECES**—The name given to an extensive series of coins or medals issued to commemorate the proclamation of the ruler as

APPENDIX A

sovereign. They occur chiefly in the Spanish and Latin-American series.

PROOF COINS—Pieces struck from polished or specially prepared dies on polished blanks. In some cases matt proofs have been produced.

PRUTAH—The unit of value of the coinage of Israel since 1949.

PU—An early Chinese copper coin derived from the earlier spade money.

PULS—A copper coin of Afghanistan, first issued in 1926.

PYA—A copper coin of Burma, first struck in 1952. 100 pyas = one rupee.

Q

QINDAR—A bronze coin of Albania, first issued in 1935.

QUADRANS—The fourth of the as in the Roman Republican series.

QUADRIGATUS—Another name for the Romano-Campanian didrachm with reverse Jupiter in four-horsed chariot.

QUADRUPLA—Meaning fourfold, it is applied to multiples of the gold scudo in the Italian series. In some instances *doppia da due* is used with the same meaning.

QUART—A silver coin of Geneva and other French-speaking cantons of Switzerland in the sixteenth and seventeenth centuries.

QUART D'ECU—A French silver coin first issued in the reign of Henri III (1574-89).

QUARTINHO—A Portuguese gold coin, value 1,000 reis, first introduced by Pedro, Prince Regent in 1677.

QUARTO—A Spanish copper coin issued originally under Ferdinand and Isabella. This denomination also occurs on some Gibraltar tokens; the regal coinage, however, spells it quart.

QUATTRINO—An Italian copper and billon coin, one-fourth of the grosso.

QUETZAL—A silver coin of Guatemala, first struck in 1925.

QUINARIUS—A Roman silver coin equal to half a denarius. It also occurs in gold as half an aureus.

R

RAMA TANKA—A South Indian gold cup-shaped coin or medal which may have been used as Temple money.

RAPPEN—A Swiss billon coin, one-tenth of the batz. After the introduction of the Latin Union System, the copper rappen became the equivalent of the centime in German-speaking cantons.

- REAL**—A Spanish silver denomination, one-eighth part of the peso, first struck in the fourteenth century. It became the standard unit of value and was extensively struck in Latin America as well as in Spain. The denomination was still continued in the nineteenth century after these states became independent. A 1/24th-real was struck by James II for the plantations in Florida and Virginia.
- REAUX**—The French equivalent of reales. This term occurs on the Franco-Spanish issues of 1541-2, and some copper coins of Oran.
- REBEL MONEY**—A name given to a series of crowns and half-crowns struck in 1643 by the Confederated Catholics in imitation of the Ormonde money.
- REDDITE CROWN**—A pattern crown of Charles II by Simon, similar in type to the Petition Crown but with the edge reading REDDITE. QVAE. CAESARIS, etc.
- REIS**—A Portuguese and Brazilian denomination (see Milreis).
- RENAISSANCE MEDALS**—A general name for the beautiful Italian medals of the fifteenth and sixteenth centuries.
- RESTITUTION COINS**—A term applied to Roman coins struck at some time after their original issue, usually in commemoration of a predecessor. They normally bear the word RESTITUIT or REST.
- RESTRICK**—A coin struck from the original dies but at a later date than the original issue.
- REVERSE**—The tail side of a coin.
- RIAL** (sometimes *Riyal* or *Ryal*)—A silver coin of Morocco, Persia, Saudi Arabia and Zanzibar.
- RIDER**—A Scottish gold coin first issued by James III in 1473, and also struck under James IV and VI.
- RIGSDALER**—A Danish silver coin, equivalent to the Taler.
- RIJDER**—A gold coin of the Netherlands, first struck late in the sixteenth century.
- RJKSDAALDER**—A Dutch silver coin of the sixteenth century and later, equivalent of the Taler.
- RIKSDALER**—The Swedish equivalent of the Taler, first issued by Gustavus I (1521-60).
- RING MONEY**—An early British and Irish form of money in the shape of a ring or bracelet, usually in gold.
- RIX DOLLAR**—A silver coin of Ceylon of the nineteenth century.
- RIYAL**—A silver coin of Saudi Arabia, first issued in 1928.

APPENDIX A

- ROSA AMERICANA**—A copper coinage by William Wood for the use of the colonists in North America in 1722-4, and so called from its type and legend.
- ROSE NOBLE**—An obsolescent name for the ryal or noble of Edward IV.
- ROSENOBEL**—A gold coin of Denmark first issued by Christian IV in 1611. It also occurs in the Dutch series and is there imitated from the ryal of Edward IV.
- ROSE RYAL**—A gold coin of James I, value thirty shillings.
- ROUBLE**—A Russian silver coin, first issued under Peter the Great in 1704.
- ROUPIE**—The French equivalent of the rupee for their issues in Pondicherry.
- ROYAL D'OR**—A French gold coin first issued under Charles IV (1322-28).
- ROYALIN**—A Danish silver coin issued for Tranquebar in the reign of Frederick V of Denmark, 1746-66.
- RUPEE**—A silver coin of India, which first appeared under the Sultans of Delhi, and eventually spread all over India.
- RUPIA**—A Portuguese silver coin for Goa and Diu.
- RUPIE**—A silver coin of German East Africa first coined in 1890.
- RYAL**—A Scottish gold coin of Mary Stuart in 1555 to 1558. A silver ryal was also issued by her in 1565 to 1567 and is popularly known as the Crookston Dollar (*q.v.*).
- RYAL**—The generally accepted name for the gold noble of Edward IV.
- RYO**—A Japanese unit of value, particularly used in connection with the oban.

S

- ST. ANDREW**¹—A Scottish gold coin first struck in the reign of Robert III (1390-1406). Also called a lion.
- ST. PATRICK'S MONEY**—Halfpence and farthings struck in Ireland about 1678 and introduced into New Jersey in 1681. They derive their name from the type.
- SALUT D'OR**—A French gold coin originally issued by Charles VI in 1421.
- SALUTE**—An Anglo-Gallic gold coin issued under Henry V and Henry VI for their French possessions.
- SALUTO D'ORO, SALUTO D'ARGENTO**—Gold and silver coins of Charles I of Anjou for Naples and Sicily (1266-85).

- SALVATOR TALER**—A Swedish silver coin of Gustavus I in 1542 and continued until the reign of Christina. The coin has a full-length representation of our Lord.
- SANESE D'ORO**—A gold coin of Siena of the fourteenth century.
- SAN THOMÉ**—A gold coin of Goa and Diu of the sixteenth century and later. It derives its name from the type.
- SANTIMS** (plural *Santimi*)—A bronze coin of Latvia, 1937-9.
- SAN VICENTE**—A Portuguese gold coin of John III and Sebastian (1521-78). It shows a full-length figure of St. Vincent.
- SAPÈQUE**—A French name for the cash used in Annam.
- SATANG**—A Siamese bronze coin of 1908 and later.
- SCEAT**—Early anonymous Anglo-Saxon silver coins from the sixth to eighth centuries. They were followed by similar pieces, usually in base silver or copper, issued by the Kings of Northumbria and the Archbishops of York (670-900).
- SCHAUTALER**—A German name for commemorative and often semi-medallic Talers.
- SCHIEDEMÜNZE**—The German equivalent of tokens—i.e. coins of base metal circulating at a higher value than their metallic content.
- SCHELLING** (French: *Escalin*)—A Dutch silver coin, sometimes in billon, with a wide circulation in the sixteenth century and later. It corresponded roughly to the English shilling.
- SCHILLING**—A denomination principally used in the North German states, as well as in some cantons in Switzerland.
- SCHILLING**—A unit of value of the Republic of Austria from 1923.
- SCHRAUBTALER**—The German name for a Box Taler (*q.v.*).
- SCHÜTZENTALER** (also *Shooting Taler*)—The name given to Talers issued to commemorate shooting festivals, principally in Germany and Switzerland.
- SCUDO**—The Italian name for the silver ecu or crown.
- SCUDO DI ORO**—An Italian gold coin issued by a number of states from the fifteenth to the nineteenth centuries.
- SCYPHATE**—A term applied to a cup-shaped coin such as the Byzantine *nomisma*.
- SEDE VACANTE**—A term used in connection with ecclesiastical coinages to denote the period between the death of one ruler and the election of his successor.
- SEMS**—In the Roman series, the half of the as.
- SEMISSIS**—The term used for the half-solidus in the late Roman and early Byzantine series.

APPENDIX A

- SEMUNCIA—The half of the uncia in the *æs* grave series.
- SEN—A Japanese copper coin, originally the counterpart of the Chinese cash. It is now the subdivision of the yen.
- SENTI—A bronze coin of Estonia, first issued in 1929.
- SEQUIN—The English form of the Italian *zecchino*. It is also extensively used for the gold coins of the Ottoman Empire.
- SERRATED COINS—Chiefly used to describe certain Roman Republican coins with edges indented like the teeth of a saw.
- SESINO—An Italian coin in copper and billon, struck in many states as a subdivision of the *grosso*.
- SESTERTIUS—A Roman Imperial brass coin introduced by Augustus, of the value of a quarter of the denarius.
- SEVEN-SHILLING PIECE—An English gold coin, one-third of a guinea, struck in the reign of George III.
- SHAHI—A copper coin of Afghanistan, first issued in 1926.
- SHEKEL—A Jewish weight standard, adopted as a coin by Simon Maccabæus (143-136 B.C.). The shekel was also a denomination used for the coinage of Sidon.
- SHILLING—An English silver coin first struck by Henry VII about 1504 and continued until the present day.
- SHO—A silver, later copper, coin of Tibet, 1909-48.
- SHORT-CROSS PENNY—The name given to the penny first issued by Henry II continued until Henry III replaced it by the long-cross penny.
- SHU—A rectangular silver coin of Japan.
- SICCA RUPEE—A silver coin of Bengal issued by the East India Company in 1773-1818, but always of the same date, A.H. 1202, Regnal Year 19. *Sicca* = current.
- SIEGE PIECES—Coins issued as money of necessity during sieges. See Obsidional Coins.
- SIGLOS—An early Persian silver coin issued about 521 B.C. to 400.
- SILQUA—A late Roman silver coin first issued by Constantine the Great.
- SILVER—The metal which has been used as the standard for the greater part of all monetary issues of the world until modern times.
- SIXAIN—A French billon coin of the sixteenth century.
- SIXPENCE—An English silver coin first struck under Edward VI about 1550-3. In Ireland the first issue was made by Henry VIII in 1546-7.
- SKAR—A copper coin of Tibet, first issued in 1908.

APPENDIX A

- SKILLING**—The Scandinavian equivalent of the Schilling. First issued in the fifteenth century, it continued until the middle of the nineteenth century.
- SLUG**—A colloquial name for the United States gold 50-dollar piece.
- SOL** (plural *Soles*)—The standard of value in Peru since 1914.
- SOLDO**—An Italian silver coin of the thirteenth century, chiefly in northern and central states; it eventually degenerated into a copper coin.
- SOLIDUS**—A Roman gold coin introduced by Constantine the Great and continued not only to the end of the Empire but also in the Byzantine series.
- SOMALO**—A silver coin of Somalia, 1950.
- SOOKOO**—A denomination struck at Fort Marlborough, Sumatra, in 1783-4.
- SOU** (also *Sol*)—A silver, then copper, French coin, also occurring in the Geneva, Luxemburg and Mainz series.
- SOU MARQUÈ**—A French colonial billon coin.
- SOVERAIN**—A gold coin of the Netherlands originally copied from the English sovereign of Mary and Elizabeth.
- SOVEREIGN**—An English gold coin, a fine, large piece, first issued under Henry VII. Under Mary its value was raised to thirty shillings, and in Elizabeth's reign this coin was known as the fine sovereign. The new issue with her profile portrait was called the pound sovereign and was worth twenty shillings. The name ceased with James I when the unite took its place. It was not revived until George III's last issue in 1817.
- SOVRANO**—A gold coin issued by Francis I of Austria for his Italian possessions in Lombardy and Venice.
- SPADE GUINEA**—A name given to the guinea of George III struck between 1787 and 1799 owing to the shield on the reverse resembling the ace of spades.
- SPADE MONEY**—A name given to certain primitive Chinese coins resembling a spade.
- SPECIEDALER**—A Danish denomination first struck under Frederick II in 1560 and equal to four Danish marks.
- SPINTRIA**—A name given to certain Roman tokens with suggestive representations.
- SPUR RYAL**—An English gold coin of James I, issued in 1619-25, value fifteen shillings.
- SRANG**—A silver coin of Tibet, first struck in 1908.

APPENDIX A

STAMPEE—A name given to the Cayenne sou when circulating in the British West Indies.

STAR PAGODA—The name given to the East India Company's Madras pagoda owing to the five-pointed star on the obverse.

STATER—A Greek denomination originally in silver and usually equivalent to a didrachm. It also became the unit of the gold coinage.

STERLING—The term as applied to coins denotes that they are of standard value or purity, and was early applied to the English penny, with the consequence that these became known abroad as esterlins (*q.v.*), a corruption of the English term.

STOOTER—A base silver or billon coin of the Netherlands first issued in the sixteenth century.

STOTINKA—A Bulgarian copper coin, the subdivision of the leva.

STÜBER—A German billon and copper coin corresponding to the Stuiver and circulating in those states nearest the Dutch border.

STUIVER—A Dutch billon and later copper coin, extensively struck from the middle of the sixteenth century, both in the Netherlands and in their overseas possessions.

STYCA—A term formerly used for the later Anglo-Saxon sceats, but now abandoned.

SUERE—A silver coin of Ecuador.

SUELDO—The Bolivian equivalent of the real.

SWORD DOLLAR—Another name for the Scottish ryal or 30-shilling piece of James VI issued in 1601-4 from its type.

SYCEE SILVER—The name given to Chinese ingots of unusually pure silver in the shape of a boat or shoe. They circulated in the interior and were based on the tael.

SYMBOL—An adjunct to the main type of a coin, which may denote a particular issue, or the badge of a magistrate, or simply be intended to fill up space.

T

TAEI—The Chinese ounce which was the standard of value. The Chinese dollar or yuan was always expressed before the Republic of 1911 in terms of the tael, whilst the tael itself was issued in some of the provinces.

TAHEGAN—A silver denomination of Armenia in the twelfth century.

TAKOE—A silver coin of the Gold Coast issued in 1796.

- TALAR**—A denomination struck by Frederick Augustus of Saxony as Duke of Warsaw between 1807 and 1815.
- TALARI**—The monetary silver unit of Abyssinia, but more specifically referring to the issues of Menelik II in 1894 to 1904.
- TALER** (formerly spelt *Thaler*)—One of the best-known denominations in the European series. The need for a large silver coin became apparent in the middle of the fifteenth century, and led to the striking first of the Guldengroschen in Tyrol in 1484, followed soon after by the Taler, which was adopted by most European states sooner or later, with variations in the name. The name is probably derived from Joachimsthal in shortened form.
- TALLERO**—The Italian equivalent of the Taler.
- TAMPANG**—A tin coin of Pahang in the Malay Peninsula.
- TANGA**—A silver coin of Portuguese India, principally of Goa. It later became a copper denomination.
- TANGKA**—The name of the Tibetan silver rupee, 1750-1950.
- TARI**—A Maltese denomination first struck by Philip Villiers de l'Isle Adam (1530-4). It eventually was struck in copper under Emmanuel Pinto (1741-73).
- TETARTEMORION**—A Greek coin, one-quarter of an obol.
- TERRITORIAL GOLD**—The name given to the privately issued gold coins in the U.S.A. between 1849 and 1860.
- TESTON**—A French silver coin first struck by Louis XII in 1514 in imitation of the Italian testone, and continued until Henry III.
- TESTONE**—An Italian silver coin first struck in the fifteenth and sixteenth centuries in many states, notably Ferrara, Milan, Mantua, Masserano, Naples, Savoy and in the Papal series.
- TESTOON**—Another name for the shilling of Henry VII issued about 1504 and those of Henry VIII and Edward VI in the English series. It was also struck by Mary Stuart in the Scottish series.
- TETRADRACHM**—A Greek silver coin equal to four drachms.
- THIRD GUINEA**—The 7-shilling piece of George III issued from 1797 to 1813.
- THISTLE CROWN**—A gold coin of James I issued from 1604 to 1619, value four shillings.
- THISTLE DOLLAR**—Another name for the Scottish double merk of James VI, dated 1578-80.
- THISTLE MERK**—A Scottish silver coin issued by James VI dated 1601-4.
- THISTLE NOBLE**—A Scottish gold coin issued by James VI in 1588. It is also known as the Scottish rose noble from its type.

APPENDIX A

- THREE-FARTHINGS**—An Irish silver coin of Henry VIII issued in 1544-6, and also a denomination in the English series of Elizabeth issued between 1561 and 1581.
- THREE-HALFPENCE**—Issued simultaneously with the preceding, and revived under William IV for colonial use. Finally discontinued in 1870.
- THREEPENCE**—An English silver coin first issued by Edward VI in 1550-3, and continued ever since until 1946, except for the Maundy threepence, which is still struck year by year. It has been replaced by the twelve-sided aluminium-bronze threepence since 1937.
- THRYMSA**—An Anglo-Saxon gold coin contemporary with the silver sscat.
- TICAL**—The silver unit of currency in Siam. It was originally globular and is often known as bullet money, but was superseded in 1861 by ordinary coins.
- TILLA**—A gold coin issued at Kashgar in Turkestan. It also occurs in Afghanistan and Khuwarezm.
- TIN**—A metal only rarely used for coins. There are the farthing of Charles II, the halfpenny and farthing of James II and William and Mary in the English series, some tradesmen's tokens, and a siege coin of Alkmaar in 1573. It was, however, used more extensively in the Dutch possessions in Batavia, Java, Sumatra and Ceylon.
- TINGLE DANGLE MONEY**—Another name for the primitive Chinese bridge money.
- TOKENS**—A name given to coins, usually in circulation at a nominal value above their metal content, struck by traders or official bodies at a time when the regular coinage of the state was insufficient to meet current needs.
- TOLA**—An Indian weight, the equivalent of the mohur. The name was not used on coins until recent times, when such pieces were struck, with Government authority, by banks and private traders to supply the need of a coin for presentation purposes.
- TOMAN**—A gold coin of Persia.
- TOMBAC**—An alloy of 88 per cent. copper and 12 per cent. zinc used in Canada for the 5-cents, 1942-3.
- TOOLED**—A term used to denote that the surface of a coin, or the legend, has been worked over by a graving tool to bring out certain details, etc.
- TORNESE**—A base-silver and copper coin issued in many Italian states from the fifteenth century onwards.

- TOSTAO**—A silver coin of Portugal, equivalent to the teston. It first appeared during the reign of John II (1481-95).
- TOSTON**—Another name for the 4-reales piece of Bolivia, Chile, Colombia, Ecuador and Peru.
- TOUCHPIECE**—A gold coin, usually the angel, pierced with a large hole, given by the monarch to certain patients whom he had touched to cure them of the "King's evil" (supposed to have been scrofula). The practice was exercised by virtue of the belief in the Divine Right of Kings. Special coins were struck for this purpose by Charles II, James II and Anne, and in silver by the Old Pretender and his two sons.
- TOURNAY GROAT**—A silver coin struck by Henry VIII in 1513-18 for Tournay in France.
- TOURNOIS**—A general name for any coin struck at Tours, but used eventually to describe the type which had originated there.
- TRADE DOLLAR**—A silver coin of the U.S.A. issued to compete with the Mexican dollar in the Orient. It was struck between 1873 and 1885, though after 1878 only as proofs. A similar coin was also issued by Japan between 1874 and 1877.
- TREMISSIS**—A late Roman and Byzantine gold coin, one-third of the solidus. The name is also used for the Merovingian gold coin of practically the same weight.
- TRESSURE**—An ornamental enclosure containing the type, found on many coins.
- TRIENS**—Originally the third of the as in the Roman *as* grave series. It is also sometimes used as an alternative name for the gold tremissis.
- TRILLINA**—A billon coin of Milan, one-third of the testone, introduced by Giovanni Maria Visconti (1402-12), and continued until the middle of the seventeenth century.
- TRIOBOL**—Another name for the hemidrachm.
- TUGRIK**—A silver coin of Mongolia, struck in 1925.
- TURNER**—A Scottish copper coin first issued by James VI from 1614. It is sometimes called a bodle and was worth twopence.
- TYMPF**—A base-silver coin of Poland first issued in 1663. It also occurs in the series struck by the Electors of Saxony as Kings of Poland, and by the Electors of Brandenburg for Polish and Lithuanian provinces.
- TYPE**—The characteristic feature (figure, object, etc.) on a coin or medal.

U

- UNCIA—The twelfth part of the as in the Roman *as* grave series.
- UNCIRCULATED—The term used chiefly in North America to describe coins in that state of preservation as if they had come fresh from the mint. The alternative terms are mint state and *Fleur de Coin* (F.D.C.).
- UNGARO—An Italian gold coin, the type of which is derived from the Hungarian ducat of Matthias Corvinus. It was common to a number of states, chiefly in the seventeenth century. Sometimes spelt *Ongaro*.
- UNICORN—A Scottish gold coin first struck under James III, 1460-88, and continued by James IV and V.
- UNIFACE—A term used to describe a coin struck on one side only.
- UNIT—A Scottish gold coin first issued by James VI after his accession to the English throne. It was the equivalent of the English unite.
- UNITE—An English gold coin first issued by James I in 1604 and worth twenty shillings. It was discontinued by Charles II after his first hammered issue of 1660-2.
- URSULA TALER—The name given to a silver Taler of Cologne, first struck in 1516, showing St. Ursula and her attendants in a ship on her way up the Rhine to Cologne, where she was martyred.

V

- VELDDAALDER—A Dutch term to describe coins issued during the course of a campaign, usually as money of necessity.
- VICTORIATUS—A Roman Republican silver coin introduced during the Second Punic War (218-201 B.C.) to supersede the *quadrigatus* and continued until 187 B.C. when the *denarius* took its place. It was so called owing to the figure of Victory on the reverse.
- VIERER—A silver coin current in the Holy Roman Empire and South Germany from the middle of the fifteenth century.
- VINTEM—A Portuguese silver coin first issued under Manuel (1495-1521). The name was later given to the copper 20-reis issued for the Portuguese colonies.
- VOTIVE COINS—A name sometimes given to Roman coins which record the vows for a ruler. It is also used to describe pieces issued for offerings in churches or temples.

W

- WHAN—A Korean unit of value corresponding to the Japanese yen.

APPENDIX A

WIDOW'S MITE—The name is derived from the New Testament, and is supposed to refer to a Greek lepton.

WILLOW-TREE COINS—An early silver issue for the Colony of Massachusetts, dated 1652. So called from the type. These are contemporary with the pine-tree and oak-tree coins.

WIRE MONEY—A name given to the Maundy coins of 1792 as the numerals are very thin, as if made of wire.

WON—The unit of value in Korea since 1906.

WOOD'S COINAGE—The name given to the Irish coins of 1722-4 designed by William Wood, with HIBERNIA on the reverse. They were so unpopular in Ireland that they were sent to the American colonies.

X

XERAPHIM—A Portuguese silver coin struck for the possessions in India, chiefly Goa and Diu, from the sixteenth century onwards. It became a unit of value, and the gold San Thomé (*q.v.*) had its value expressed in xeraphims.

XU—An aluminium 20-xu was issued in Viet-Nam (Indo-China) in 1924.

Y

YANG—A former silver unit of Korea, first used on coins in 1894.

YEN—The unit of value in modern Japan. It was first struck in 1870 (Meiji 3) under Mutsuhito.

YUAN—The Chinese name for the dollar. It is the equivalent of the Japanese yen.

YUZLIK—The largest Turkish silver coin.

Z

ZECCHINO—An Italian gold coin corresponding in size to the ducat; it originated in Venice about 1280, but was also issued later by other Italian states. It is sometimes referred to as a sequin.

ZLOTY—A Polish silver coin, first issued under Augustus III (1733-63). The name appears on the Russian issues for Poland in the nineteenth century and was revived by the Polish Republic in 1924.

ZODIACAL COINS—A name given to a set of twelve gold mohurs issued by Jahangir, Moghul Emperor (1605-27), each bearing one of the signs of the Zodiac. Silver rupees were also issued but no complete set of the twelve signs is known.

Appendix B

A SELECT NUMISMATIC BIBLIOGRAPHY

Another note of explanation. Here, too, I have had to make a difficult choice. In most cases I have included the standard works, in whatever language they are written, and even when copies are practically unobtainable. This seemed to me to be essential, and of course these may be consulted at most museums with a good coin collection, and its attendant library. In other cases I have tended to select works in English wherever possible. In very few cases have I referred to articles in journals, reviews, etc., although there is a good deal of information not available elsewhere, as it seemed to me that this would make the list too long. But may I suggest that you invest in GRIERSON'S excellent *Coins and Medals—A Select Bibliography*, where you will find several works not listed by me, as also many references to specialised articles, and where to find them. My arrangement differs from his for no particular reason; our minds work differently. Also my selection differs in that my aim has largely been to indicate books which enable coins to be classified, whilst his has been to lay stress on those works which deal with the historical implications of the coins. Both are of course essential; without reference to the coins themselves, their historical importance is difficult to grasp, and they must therefore be classified; without a historical background, the amassing of coins is meaningless.

CONTENTS OF THE LIST

I. GENERAL WORKS

Page
160

1. On the subject in general
2. Works of Reference
 - (a) Bibliography

I.	General Works— <i>cont.</i>	Page
	(b) Encyclopædias	
	(c) Coin Legends and Types	
	(d) Genealogical Tables	
	(e) Dates	
	(f) Biographical Dictionaries	
II.	BRITISH, ANGLO-SAXON AND ENGLISH	162
	1. Ancient British	
	2. Romano-British	
	3. Anglo-Saxon	
	4. General Works on English Coins	
	5. Works on Particular Periods	
	6. British Tokens	
III.	SCOTLAND AND IRELAND	163
IV.	GREEK COINAGE	164
	1. General Works	
	2. Catalogues	
	3. Special Studies	
V.	ROMAN COINAGE	166
	1. General Works	
	2. Roman Republic	
	3. Roman Empire	
VI.	IMPERIAL BYZANTINE COINAGE	168
VII.	CELTIC COINAGE	168
	1. Gaul	
	2. East Celts	
	3. Celtiberian	
VIII.	THE DARK AGES	169
	1. Vandals	
	2. Visigoths and Suevi	
	3. Ostrogoths	
	4. Lombards	
	5. Franks: Merovingians	
	6. Franks: Carolingians	
IX.	MEDIÆVAL AND MODERN EUROPE	170
	1. General Works	
	2. France	
	(a) Regal	
	(b) Feudal	

IX. Mediæval and Modern Europe— <i>cont.</i>	Page
3. The Netherlands	
4. Belgium	
5. Germany	
6. Switzerland	
7. Austria	
(a) General Works	
(b) Regional Studies	
8. Italy	
(a) General Works	
(b) Regional Studies	
9. Spain	
(a) General Works	
(b) Moorish States	
(c) Christian States	
10. Portugal	
11. Scandinavia	
(a) Denmark and Norway	
(b) Sweden	
12. Russia and Poland	
(a) Russia	
(b) Poland	
13. Crusader and Christian States of the Near East	
14. Obsidional Money	
X. EUROPEAN COLONIAL COINAGE	176
1. British Dominions and Colonies	
(a) General Works	
(b) Regional Studies	
2. Spanish Colonies	
(a) During Spanish Rule	
(b) After Independence	
3. Portuguese Colonies	
4. French Colonies	
5. Dutch Colonies	
XI. UNITED STATES OF AMERICA	178
XII. ORIENTAL COINAGE	178
1. Persia	
2. Jewish Coinage	
3. Islamic Coinage	

	Page
XIII. THE COINAGE OF INDIA	179
1. General Works	
2. Special Studies	
XIV. THE COINAGE OF THE FAR EAST	180
1. General Works	
2. China	
3. Japan	
4. Other Countries	
XV. PRIMITIVE MONEY	181
XVI. JETTONS AND WEIGHTS	181
1. Jettons	
2. Coin-Weights	
XVII. COMMEMORATIVE MEDALS	182
1. Great Britain	
2. Italy	
3. France	
4. Germany and Austria	
5. The Netherlands	
6. Scandinavia	
7. Some Other Countries	
XVIII. PAPER MONEY	183

(V) after a work indicates that valuations of the coins are given.

I. GENERAL WORKS

1. On the subject in general

- LANE-POOLE, S.—*Coins and Medals: Their Place in History and Art*. 3rd ed. London, 1894.
- MACDONALD, G.—*The Evolution of Coinage*. Cambridge, 1916.
- BURGESS, F.—*Chats on Old Coins*. London, 1913.
- RAWLINGS, G. B.—*Coins and How to Know Them*. 5th ed. London, 1935.
- COFFIN, J.—*Coin Collecting*. New York, 1938.
- CHAMBERLAIN, C. C.—*Collecting Coins*. London, n.d.
- MILNE, SUTHERLAND and THOMPSON.—*Coin Collecting*. Oxford, 1951.
- RAYMOND, W.—*Coins of the World—Nineteenth-century Issues*. 2nd ed. New York, 1953. (V).
- RAYMOND, W.—*Coins of the World—Twentieth-century Issues*. 4th ed. New York, 1951. And Supplement, 1952. (V).

2. Works of Reference

(a) Bibliography

GRIERSON, P.—*Coins and Medals—A Select Bibliography*, London, 1954.

(b) Encyclopædias

SCHROTTER, F. von.—*Wörterbuch der Münzkunde*. Berlin-Leipzig, 1930.

MARTINORI, R.—*La Moneta*. Rome, 1915.

FREY, A. R.—*Dictionary of Numismatic Names*. New York, 1947.

(c) Coin Legends and Types

RENTZMANN, W.—*Numismatisches Legenden-Lexicon des Mittelalters und der Neuzeit*. 2 Vols. Berlin, 1865-6. Supplement, 1878.

SCHLICKEYSEN, F. W. A.—*Erklärung der Abkürzungen auf Münzen der neueren Zeit, des Mittelalters und des Alterthums*. 3rd ed. by R. Pallmann. Berlin-Stuttgart, 1896.

RENTZMANN, W.—*Numismatisches Wappen-Lexicon des Mittelalters und der Neuzeit*. Berlin, 1896 Reprinted Halle, 1924.

ROLLA, M.—*Fascio Numismatico . . sulle Monete Italiane*. Turin, 1947.

(d) Genealogical Tables

GROTE, H.—*Stammtafeln*. Leipzig, 1877.

WILBERG, M.—*Regenten-Tabellen*. Leipzig, 1906.

WARD, PROTHERS and LEATHES.—*The Cambridge Modern History*, Vol. XIII. Cambridge, 1934.

(e) Dates

VINCENT, B.—*Haydn's Dictionary of Dates*, 25th ed. London, 1910.

ARNOLD-BAKER and DENT.—*Everyman's Dictionary of Dates*. London, 1954.

(f) Biographical Dictionaries

MERRIAM-WEBSTER, A.—*Webster's Biographical Dictionary*. Springfield, 1943.

FORRER, L.—*Biographical Dictionary of Medallists, Coin, Gem and Seal Engravers, Ancient and Modern, with References to their Works, 500 B.C.—A.D. 1900*. 8 Vols. London, 1902-29.

THIEME and BECKER—*Allgemeines Lexikon der bildenden Künstler, von der Antike bis zur Gegenwart*. 32 Vols. Leipzig, 1907-38.

II. BRITISH, ANGLO-SAXON AND ENGLISH

1. Ancient British

- EVANS, J.—*The Coinage of the Ancient Britons*. London, 1864.
Supplement, 1890.
 ALLEN, D. F.—“The Belgic Dynasties of Britain and Their Coins.”
Archæologia, Vol. XC (1944).
 MACK, R. P.—*The Coinage of Ancient Britain*. London, 1953.

2. Romano-British

- AKERMAN, J. Y.—*Coins of the Romans Relating to Britain*. London, 1844.
 SUTHERLAND, C. H. V.—*Coinage and Currency in Roman Britain*.
 Oxford, 1937.

3. Anglo-Saxon

- KEARY and GRUEBER—*Catalogue of English Coins in the British Museum*
 —*Anglo-Saxon Series*. 2 Vols. London, 1887-93.
 SUTHERLAND, C. H. V.—*Anglo-Saxon Gold Coinage in the Light of the*
Crondall Hoard. London, 1948.

4. General Works on English Coins

- BROOKE, G. C.—*English Coins*. 3rd ed. London, 1950.
 OMAN, C.—*The Coinage of England*. Oxford, 1931.
 GRUEBER, H. A.—*Handbook of the Coins of Great Britain and Ireland in the*
British Museum. London, 1899.
 SEABY, H. A.—*Standard Catalogue of the Coins of Great Britain and*
Ireland. London, 1954. (V).
 KENYON, R. LLOYD.—*The Gold Coins of England*. London, 1884.
 HAWKINS, E.—*The Silver Coins of England*. London, 1887.
 SEABY, H. A.—*The English Silver Coinage, 1649-1949*. London, 1949.
 SPINK & SON, LTD.—*The Milled Coinage of England*. London, 1950.
 SEABY, H. A.—*Notes on English Silver Coins*. London, 1948.
 MONTAGU, H.—*Copper, Tin and Bronze Coinage and Patterns for Coins of*
England. 2nd ed. London, 1893.
 BRAMAH, E.—*English Regal Copper Coins*. London, 1929.
 GARSIDE, H.—*British Imperial Copper and Bronze Coinage, 1838-1925*
 2 Parts. London, 1920-35.

SEABY, H. A.—*A Catalogue of the Copper Coins and Tokens of the British Isles*. London, 1949. (V).

RUDING, R.—*Annals of the Coinage*. 3 Vols. 3rd ed. London, 1840.

5. Works on Particular Periods

BROOKE, G. C.—*Catalogue of English Coins in the British Museum—The Norman Kings*. 2 Vols. London, 1916.

ALLEN, D. F.—*Catalogue of English Coins in the British Museum—The Cross-and-Crosslets (Tealby) Type of Henry II*. London, 1951.

HEWLETT, L.—*Anglo-Gallic Coins*. London, 1920.

NELSON, P.—*The Obsidional Coinage of the Great Rebellion*. London, 1907.

CRAIG, J.—*The Royal Mint*. Cambridge, 1953.

CRAIG, J.—*Newton at the Mint*. Cambridge, 1946.

6. British Tokens

BOYNE, W.—*Trade Tokens Issued in the Seventeenth Century in England, Wales and Ireland*. Revised ed. by G. C. Williamson. 2 Vols. London, 1889-92.

DALTON and HAMER.—*The Provincial Token Coinage of the Eighteenth Century*. 14 Parts. 1910-18.

DAVIS, W. J.—*The Nineteenth-century Token Coinage of Great Britain, Ireland, the Channel Islands and the Isle of Man*. London, 1904.

DALTON, R.—*The Silver Token Coinage mainly issued between 1811 and 1812*. 1922.

PHILLIPS, M.—*The Token Money of the Bank of England, 1797 to 1806*. London, 1900.

BURN, J. H.—*Descriptive Catalogue of the London Traders, Tavern and Coffee-house Tokens Current in the Seventeenth Century*. 2nd ed. London, 1855.

LONGMAN, W.—*Tokens of the Eighteenth Century connected with Booksellers and Bookmakers*. London, 1916.

III. SCOTLAND AND IRELAND

BURNS, E.—*The Coinage of Scotland*. 3 Vols. Edinburgh, 1887.

RICHARDSON, A. B.—*Catalogue of the Scottish Coins in the National Museum of Antiquities*. Edinburgh, 1902.

NOLAN, P.—*A Monetary History of Ireland*. 2 Vols. London, 1926-8.

ROTH, B.—*The Coins of the Danish Kings of Ireland—Hiberno-Danish Series*. London, 1910.

NELSON, P.—*Coinage of Ireland in Copper, Tin and Pewter, 1460-1826*. London, 1905.

(See also GRUEBER: *Handbook*, and SEABY: *Standard Catalogue* in Section II, 4.)

IV. GREEK COINAGE

1. General Works

HEAD, B. V.—*Historia Numorum. A Manual of Greek Coins*. 2nd ed. Oxford, 1911.

BABELON, E.—*Traité des monnaies grecques et romaines*. 2c partie. Vols. I-IV. Paris, 1907-32. (In spite of the title, this work is unfinished, and does not treat of Roman coins at all.)

SELTMAN, C. T.—*Greek Coins. A History of Metallic Currency and Coinage Down to the Fall of the Hellenistic Kingdoms*. 2nd ed. London, 1954.

HILL, G. F.—*A Handbook of Greek and Roman Coins*. London, 1899.

MILNE, J. G.—*Greek Coinage*. Oxford, 1931.

GARDNER, P.—*A History of Ancient Coinage, 700-300 B.C.* Oxford, 1918.

MILNE, J. G.—*Greek and Roman Coins, and the Study of History*. London, 1939.

HILL, G. F.—*Historical Greek Coins*. London, 1906.

GARDNER, P.—*Types of Greek Coins*. London, 1883.

SELTMAN, C. T.—*Masterpieces of Greek Coinage*. London, 1949.

SELTMAN, C. T.—*A Book of Greek Coins*. London, 1952.

FORRER, L.—*Notes sur les signatures de graveurs sur les monnaies grecques*. Brussels, 1906.

WARD, J.—*Greek Coins and their Parent Cities*. London, 1902.

HANDS, A. W.—*Common Greek Coins*. London, 1908.

2. Catalogues

VARIOUS—*Catalogue of Greek Coins in the British Museum*. 29 Vols. London, 1873-1922. This catalogue is incomplete, but the volumes so far published are: *Italy; Sicily; Thrace; Seleucid Kings of Syria; Macedonia; Thessaly to Ætolia; Ptolemaic Kings of Egypt; Central Greece; Crete and the Ægean Islands; Peloponnesus; Attica, Megaris, Ægina; Corinth, etc.; Pontus, Paphlagonia, etc.; Mysia;*

Alexandria, etc.; Ionia; Troas, Æolis and Lesbos; Caria and the Islands; Lycia, Pamphylia and Pisidia; Galatia, Cappadocia and Syria; Lycaonia, Isauria and Cilicia; Lydia; Parthia; Cyprus; Phrygia; Phœnicia; Palestine; Arabia, Mesopotamia and Persia; Cyrenaica.

ANON.—*Sylloge Nummorum Græcorum.*

- (1) British Series: Vol. I, 2 Parts. *Spencer-Churchill, Salting and Aberdeen Collections.*

Vol. II, 8 Parts. *Lloyd Collection.*

Vol. III, 5 Parts. *Lockett Collection.*

Vol. IV, 3 Parts. *Fitzwilliam Museum, Cambridge.*

Vol. V, 1 Part. *Ashmolean Museum, Oxford.* London, 1931-51.

(This publication is incomplete, and parts of several volumes are still to come.)

- (2) Danish Series: (Greek Coins of the Royal Collection in the Danish National Museum at Copenhagen). Copenhagen, 1942-8.

Italy, 3 Parts; Sicily, 2 Parts; Thrace, 2 Parts; Macedonia, 3 Parts; Thessaly-Illyricum; Epirus-Acarnania; Ætolia-Eubœa; Attica-Ægina; Corinth; Phliasia-Laonia; Argolis-Ægean Islands; Bosphorus-Bithynia; Mysia; Troas; Æolis-Lesbos; Ionia, 3 Parts; Caria, 2 Parts; Lydia, 2 Parts; Phrygia, 1 Part to date.

(This publication is also incomplete.)

MACDONALD, G.—*Catalogue of Greek Coins in the Hunterian Collection, University of Glasgow.* 3 Vols. Glasgow, 1899-1905.

GROSE, S. W.—*Fitzwilliam Museum, Cambridge. Catalogue of the McLean Collection of Greek Coins.* 3 Vols. Cambridge, 1923-9.

FORRER, L.—*The Weber Collection.* 3 Vols. (in 4). London, 1922-9.

BABELON, J.—*Catalogue de la Collection de Luynes.* 4 Vols. (in 5). Paris, 1924-36.

[JAMESON, R.]—*Collection R. Jameson.* 4 Vols. (in 5). Paris, 1913-32.

HILL, G. F.—*A Guide to the Principal Coins of the Greeks.* London, 1932.

ROBINSON, E. S. G.—*Catalogue of Ancient Greek Coins Collected by Godfrey Locker Lampson.* London, 1923.

REGLING, K.—*Die griechischen Münzen der Sammlung Warren.* Berlin, 1907.

(The above is only a selection of such catalogues, and they are the

ones to which reference is most often made. I would like to add one more, although it is a sale catalogue, as it, too, is often quoted):

HIRSCH, J.—*Monnaies grecques antiques provenant de la collection de feu le Prof. S. Pozzi*. Geneva, 1920. (V).

3. Special Studies

SELTMAN, C. T.—*Athens, its History and Coinage before the Persian Invasion*. Cambridge, 1924.

SVORONOS, J. N.—*Trésor des monnaies d'Athènes*. Athens.

SELTMAN, C. T.—*The Temple Coins of Olympia*. Cambridge, 1921.

BOEHRINGER, E.—*Die Münzen von Syrakus*. Berlin-Leipzig, 1929.

TUDEER—*Die Tetradrachmenprägung von Syrakus in der Periode der signierenden Künstler*. Berlin.

HILL, G. F.—*Coins of Ancient Sicily*. London, 1903.

REGLING, K.—*Terina*. Berlin, 1906.

RAVEL, O.—*Les "Poulains" de Corinthe*. 2 Vols. Basel-London, 1936-48.

CAHN, H. A.—*Die Münzen der sizilischen Stadt Naxos*. Basel, 1944.

MAY, J. M. F.—*Ainos, Its History and Coinage*. London, 1950.

HANDS, A. W.—*Coins of Magna Græcia*. London, 1909.

DESNEUX, J.—*Les tetradrachmes d'Akanthos*. Brussels, 1949.

MULLER, L.—*Numismatique de l'ancienne Afrique*. Vols. II, III. Copenhagen, 1860-2. Supplement, 1874.

(The above selection is only a few of the large number of such specialised works.)

V. ROMAN COINAGE

I. General Works

MATTINGLY, H.—*Roman Coins, from the Earliest Times to the Fall of the Western Empire*. London, 1928.

GNECCHI, F. (trans. A. W. Hands)—*Roman Coins—Elementary Manual*. London, 1903.

MILNE, J. G.—*Greek and Roman Coins, and the Study of History*. London, 1939.

HILL, G. F.—*Historical Roman Coins*. London, 1909.

STEVENSON, S. W.—*A Dictionary of Roman Coins*. London, 1889.

2. Roman Republic

- BABELON, E.—*Description historique et chronologique des monnaies de la république romaine*. 2 Vols. Paris, 1885-6.
- GRUEBER, H. A.—*Coins of the Roman Republic in the British Museum*. 3 Vols. London, 1910.
- SYDENHAM, E. A.—*The Coinage of the Roman Republic*. London, 1952.
- SEABY, H. A.—*Roman Silver Coins (Republic to Augustus)*. London, 1953. (V).
- HAEBERLIN, E. J.—*Æs Grave. Das Schwergeld Roms und Mittelitaliens*. 2 Vols. Frankfurt, 1900.
- SYDENHAM, E. A.—*Æs Grave*. London, 1926.
- BAHRFELDT, M. von.—*Die römische Goldmünzenprägung während der Republik und unter Augustus*. Halle, 1923.

3. Roman Empire

- COHEN, H.—*Description historique des monnaies sous l'empire romain*. 8 Vols. 2nd ed. Paris, 1880-92. (V).
- MATTINGLY and SYDENHAM—*The Roman Imperial Coinage*. 6 Vols. (in 9), to date. London, 1923 ff.
- I. Augustus-Vitellius.
 - II. Vespasian-Hadrian.
 - III. Antoninus Pius-Commodus.
 - IV. (3 Parts) Pertinax-Uranus Antoninus.
 - V. (2 Parts) Valerian-Amandus.
 - IX. Valentinian I-Theodosius I.
- MATTINGLY, H.—*Coins of the Roman Empire in the British Museum*. 5 Vols. (in 6) to date. London, 1923 ff.
- I. Augustus-Vitellius.
 - II. Vespasian-Domitian.
 - III. Nerva-Hadrian.
 - IV. Antoninus Pius-Commodus.
 - V. (2 Parts) Pertinax-Elagabalus.
- BERNHART, M.—*Handbuch zur Münzkunde der römischen Kaiserzeit*. 2 Vols. Halle, 1926.
- SUTHERLAND, C. H. V.—*Coinage in Roman Imperial Policy, 31 B.C.-A.D. 68*. London, 1951.
- GRANT, M.—*Roman Anniversary Issues*. Cambridge, 1950.
- SYDENHAM, E. A.—*The Coinage of Nero*. London, 1926.
- TOYNBEE, J. M. C.—*Roman Medallions*. New York, 1944.

- GRUEBER, H. A.—*Roman Medallions in the British Museum*. London, 1874.
 GNECCHI, F.—*I medaglioni romani*. 3 Vols. Milan, 1912.
 ALFOLDI, A.—*Die Kontorniaten*. Budapest, 1943.

VI. IMPERIAL BYZANTINE COINAGE

- WROTH, W.—*Catalogue of the Imperial Byzantine Coins in the British Museum*. 2 Vols. London, 1908.
 SABATIER, J.—*Description générale des monnaies byzantines*. 2 Vols. Paris, 1862.
 GOODACRE, H.—*A Handbook of the Coinage of the Byzantine Empire*. 3 Parts. London, 1928-33. (V).
 TOLSTOI, J.—*Monnaies byzantines*, (in Russian). 8 Parts (unfinished). St. Petersburg, 1913-14.
 RATTO, R.—*Monnaies byzantines*. Lugano, 1930. (V).
 WROTH, W.—*Catalogue of the Coins of the Vandals, Ostrogoths and Lombards, and the Empire of Thessalonica, Nicæa and Trebizond, in the British Museum*. London, 1911.
 KRAUS, F. F.—*Die Münzen Odovacars und des Ostgotenreiches in Italien*. Halle, 1928.

VII. CELTIC COINAGE

1. Gaul

- BLANCHET, A.—*Traité des monnaies gauloises*. 2 Vols. Paris, 1905.
 BLANCHET and DIEUDONNE.—*Manuel de numismatique française*. Vol. I. *Monnaies frappées en Gaule depuis les origines jusqu'à Hugues Capet*. Paris, 1912.
 MURET and CHABOUILLET.—*Catalogue des monnaies gauloises de la Bibliothèque Nationale*. Paris, 1889.
 DE LA TOUR, H.—*Atlas des monnaies gauloises*. Paris, 1892. (Used in conjunction with Muret.)
 ROTH, B.—*Ancient Gaulish Coins, including those of the Channel Islands*. London, 1913.
 (For the corresponding period in Britain see Section II, 1.)

2. East Celts

- PINK, K.—"Einführung in die Keltische Münzkunde mit besonderer Berücksichtigung Oesterreichs." *Archæologia Austriaca*, VI (1950).

APPENDIX B

FORRER, R.—*Keltische Numismatik der Rhein- und Donaulande*. Strassburg, 1908.

DESSEWFFY, M.—*Barbar Penzei*. Budapest, 1910.

PINK, K.—*Die Münzprägung der Ostkelten und ihrer Nachbarn*. Budapest, 1939.

3. Celtiberian

HEISS, A.—*Description générale des monnaies antiques d'Espagne*. Paris, 1870.

VIVES Y ESCUDERO, A.—*La moneda Hispanica*. 4 Vols. Madrid, 1924-6.

BELTRAN MARTINEZ, A.—*Curso de Numismática*. Vol. I. *Numismática antigua clásica y de España*. Cartagena, 1950.

VIII. THE DARK AGES

1. Vandals

WROTH, W.—*Catalogue of the Coins of the Vandals, Ostrogoths and Lombards . . . in the British Museum*. London, 1911.

2. Visigoths and Suevi

MILES, G. C.—*The Coinage of the Visigoths of Spain: Leovigild to Achila II*. New York, 1952.

MATEU Y LLOPIS, F.—*Catálogo de las monedas previsigodas y visigodas del Gabinete numismático del Museo Arqueológico Nacional*. Madrid, 1936.

REINHART, W.—“Die Münzen des Swebenreiches.” *Mitt. der Bayerischen Num. Ges.* LV. (1937).

3. Ostrogoths

WROTH, W.—*Catalogue of the Coins of the Vandals, Ostrogoths . . . in the British Museum*. London, 1911.

KRAUS, F. F.—*Die Münzen Odovacars und des Ostgotenreiches in Italien*. Halle, 1928.

4. Lombards

WROTH, W.—*Catalogue of the Coins of the . . . Lombards in the British Museum*. London, 1911.

SAMBON, G.—*Recueil des monnaies médiévales du sud d'Italie avant la domination des Normands*. Paris, 1919.

5. Franks: Merovingians

- BELFORT, A. DE.—*Description générale des monnaies mérovingiennes*. 5 Vols. Paris, 1892-5.
 PROU, M.—*Les monnaies mérovingiennes. Catalogue des monnaies françaises de la Bibliothèque Nationale*. Paris, 1892.
 LE GENTILHOMME, P.—*Mélanges de numismatique mérovingienne*. Paris, 1940.

6. Franks: Carolingians

- GARIEL, E.—*Les monnaies royales de France sous la race carolingienne*. 2 Vols. Strassburg, 1883-4.
 PROU, M.—*Les monnaies carolingiennes*. Paris, 1896.

IX. MEDÆVAL AND MODERN EUROPE

1. General Works

- ENGEL and SERRURE.—*Traité de numismatique du moyen âge*. 3 Vols. Paris, 1891-1905.
 CHAUTARD, J.—*Imitation des monnaies au type esterlin*. Nancy, 1872.
 ENGEL and SERRURE.—*Traité de numismatique moderne et contemporaine*. 2 Vols. Paris, 1887-9.
 THOMSEN, C. J.—*Les monnaies du moyen-âge*. 3 Vols. Copenhagen, 1873-6.
 HAZLITT, W. C.—*The Coinage of the European Continent*. London, 1893. Supplement, 1897.
 COMENCINI, M.—*Coins of the Modern World, 1870-1936*. London, 1937. (V).
 RAYMOND, W.—*Coins of the World. Nineteenth-century Issues*. 2nd ed. New York, 1953, and *Twentieth-century Issues*. 4th ed. New York, 1951. (V).
 DAVENPORT, J. S.—*European Crowns since 1800*. Buffalo, 1947. (V).

2. France

(a) Regal

- BLANCHET and DIEUDONNÉ.—*Manuel de numismatique française*. Vol. II. *Monnaies royales françaises depuis Hugues Capet jusqu'à la Révolution*. Paris, 1916.
 HOFFMANN, H.—*Les monnaies royales de France*. Paris, 1878. (V).

APPENDIX B

- CIANI, L.—*Les monnaies royales françaises de Hugues Capet à Louis XVI, and Les monnaies françaises de la Révolution à la fin du Premier Empire, 1789-1815.* 2 Vols. Paris, 1926-31. (V).
- LAFaurie, L.—*Les monnaies des rois de France. Vol. I. Hugues Capet à Louis XII.* Paris-Basel, 1951. (V).
- G[VUILLOTEAU], V.—*Monnaies françaises. Colonies 1670-1942. Métropole 1774-1942.* Versailles, 1942. (V).

(b) Feudal

- POEY D'AVANT, F.—*Les monnaies féodales de la France.* 3 Vols. Paris, 1858-62.
- CARON, E.—*Monnaies féodales françaises.* Paris, 1882.
- BLANCHET and DIEUDONNE.—*Manuel de Numismatique française: Vol. IV. Les monnaies féodales.* Paris, 1936.
- ROLLIN and FEUARDENT.—*Catalogue des monnaies royales et seigneuriales de France, depuis les Mérovingiens jusqu'à nos jours.* 3rd ed. Paris/London, 1900. (V).

3. The Netherlands

- VAN DER CHIJS, P. O.—*De munten der Nederlanden van de vroegste tijden tot aan de Pacificatie van Gend (1576).* 9 Vols. Haarlem, 1851-66.
- GAILLARD, V.—*Recherches sur les monnaies des comtes de Flandre.* Ghent, 1854.
- DE WITTE, A.—*Histoire monétaire des comtes de Louvain, ducs de Brabant.* 3 Vols. Antwerp, 1894-9.
- VERKADE, P.—*Muntboek, etc.* Schiedam, 1848. (From 1576 to 1848.)
- SCHULMAN, J.—*Handboek van de nederlandsche munten van 1795-1945.* Amsterdam, 1946.

4. Belgium

- DUPRIEZ, C.—*Monnaies et essais monétaires du royaume de Belgique et du Congo Belge.* 2 Vols. and plates. Brussels, 1949.

5. Germany

- GEBHART, H.—*Die deutschen Münzen des Mittelalters und der Neuzeit.* Berlin, 1929.
- DANNENBERG, H.—*Die deutschen Münzen der sächsischen und fränkischen Kaiserzeit.* 4 Vols. and plates. Berlin, 1876-1905.

- SCHLUMBERGER, G. L.—*Les bractéates d'Allemagne*. Paris, 1874.
- SCHULTHESS-RECHBERG.—*Thaler Cabinet. Beschreibung aller bekannt gewordenen Thaler*. 5 Parts. Vienna-Munich, 1840-67.
- REIMANN, W.—*Münzen und Medaillen Cabinet*. 3 Vols. Frankfurt, 1891-2.
- DAVENPORT—*German Talers since 1800*. Galesburg, 1949. (V).
- SCHWALBACH, C.—*Die neuesten deutschen Thaler, Doppelthaler, Doppelgulden*. 8th ed. Munich, 1915.
- SCHWALBACH, C.—*Die neuesten deutschen Münzen unter Talergrösse*. Leipzig, 1904.
- JAEGER, K.—*Die deutschen Reichsmünzen seit 1871*. 2nd ed. Basel, 1948.
- (Owing to the division of Germany into many states, most of the numismatic literature deals with individual regions or mints. For a useful list of these see GRIERSON, P.: *Coins and Medals—A Select Bibliography*, pp. 43-7.)

6. Switzerland

- CORRAGONI, L.—*Münzgeschichte der Schweiz*. Geneva, 1896.
- TOBLER-MEYER, W.—*Die Münz- und Medaillen-Sammlung des Herrn Hans Wunderly von Muralt*. 5 Vols. Zürich, 1896-8.
- POOLE, R. S.—*A Descriptive Catalogue of the Swiss Coins in the South Kensington Museum*. London, 1878.

7. Austria

(a) General Works

- LOEHR, A. VON.—*Oesterreichische Geldgeschichte*. Vienna, 1946.
- MILLER ZU AICHHOLZ, C.—*Oesterreichische Münzprägungen, 1519-1938*. 2nd ed. Vienna, 1948.
- MOESER and DWORSCHAK.—*Die grosse Münzreform unter Erzherzog Sigmund von Tirol*. Vienna, 1936.

(b) Regional Studies

- FIALA, E.—*Beschreibung der Sammlung böhmischer Münzen und Medaillen des Max Donebauer*. 2 Vols. Prague, 1899.
- RETHY, L.—*Corpus nummorum Hungariae*. 2 Vols. Budapest, 1899-1907.
- RESCH, A.—*Siebenbürgische Münzen und Medaillen von 1538 bis zur Gegenwart*. Hermannstadt, 1901. (Coinage of Transylvania.)
- LJUBIC, S.—*Opis jugoslavenskih novaca*. Zagreb, 1875.

8. Italy

(a) General Works

- ANON.—*Corpus Nummorum Italicorum*. Vols. I-XIX. Rome, 1910-40.
 I. Savoy. II. Piedmont. III. Liguria. IV-V. Lombardy.
 VI-VIII. Veneto. IX-X. Emilia. XI-XII. Tuscany. XIII. Marches.
 XIV. Umbria and Lazio. XV-XVII. Rome. XVIII-XIX. South
 Italy.

(This work is still incomplete.)

- PAGANI, A.—*Monete italiane moderne a sistema decimale (1800-1946)*.
 Milan, 1947.
 HAMBURGER, L.—*Cabinet de Monsieur le Chevalier E. Gneccchi de Milan*.
 3 Parts. Frankfurt, 1901-3.
 SPAZIANI TESTA, G.—*Ducati, Piastre, Scudi, Talleri e loro multipli
 battuti in zecche italiane e da italiani all' estero*. 2 Vols. to date.
 Rome, 1951 ff.
 I. Casa Savoia da Filiberto II a Vittorio Emanuele III (1497-
 1946).
 II. I Romani Pontefici, interregni e occupazioni degli Stati
 Pontifici (1523-1870). (V).

(b) Regional Studies

- GNECCHI, F. and E.—*Le monete di Milano*. With Supplement. Milan,
 1884-94.
 PAPPADOPOLI, N.—*Le monete di Venezia*. 3 Vols. (in 4). Venice, 1893-
 1919.
 GALEOTTI, A.—*Le monete del granducato di Toscana*. Leghorn, 1930.
 SERAFINI, C.—*Le monete e le bolle plumbee pontificie del Medagliere
 Vaticano*. 4 Vols. Milan, 1910-28.
 SAMBON, A.—*Recueil des monnaies médiévales du sud d'Italie avant la
 domination des Normands*. Paris, 1919.
 CAGIATI, M.—*Le monete del reame delle Due Sicilie da Carlo I d'Angio a
 Vittorio Emanuele I*. 10 fasc. Naples, 1911-37.

9. Spain

(a) General Works

- MATEU Y LLOPIS, F.—*La moneda española*. Barcelona, 1946.
 ANON.—*Catálogo de la colección de monedas y medallas de Manuel Vidal
 Quadras y Ramón de Barcelona*. 4 Vols. Barcelona. 1892.
 ANON.—*Catálogo de la colección numismática de Emilio Carles-Tolrà*.
 Barcelona, 1936.

APPENDIX B

(b) Moorish States

- RIVERO, C. M. DEL.—*La moneda árabe-española. Compendio de numismática musulmana.* Madrid, 1933.
- LAVOIX, H.—*Catalogue des monnaies musulmanes de la Bibliothèque Nationale. Espagne et Afrique.* Paris, 1891.
- MILES, G. C.—*The Coinage of the Umayyads of Spain.* 2 Vols. New York, 1950.

(c) Christian States

- HEISS, A.—*Descripción general de las monedas hispano-cristianas desde la invasión de los Arabes.* 3 Vols. Madrid, 1865-9.
- BOTET Y SISO, J.—*Las monedas catalanes.* 3 Vols. Barcelona, 1908-11.
- HERRERA, A.—*El duro. Estudio de los reales de a ocho españoles.* 2 Vols. Madrid, 1914.
- DASI, T.—*Estudio de los reales de a ocho.* 5 Vols. Valencia, 1950-1.

10. Portugal

- TEIXEIRA DE ARAGAO, A. C.—*Descrição geral e historica das moedas cunhadas em nome dos reis, regentes e governadores de Portugal.* 3 Vols. Lisbon, 1874-80.
- FERRARO VAZ, J.—*Catalogo das moedas portuguesas. Portugal continental, 1640-1948.* Lisbon, 1948. (V).

11. Scandinavia

(a) Denmark and Norway

- GALSTER, G.—*Die Münzen Dänemarks, bis etwa 1625.* Halle, 1939.
- SCHOU, H. H.—*Beskrivelse af danske og norske mønter, 1488-1814, og danske mønter 1815-1923.* Copenhagen, 1926.
- BJORNSTAD and HOLST.—*Norges mynter efter 1814.* Oslo, 1927.
- BRUUN, L. E.—*Mønt-og medaille-samling.* Copenhagen, 1928.
- MANSFELD-BULLNER, H. V.—*Afbildninger af samtlige hidtil kjendte Danske mønter fra Tidsrummet 1241-1377.* New revised ed. Copenhagen, 1954.

(b) Sweden

- WALLROTH, K. A.—*Sveriges mynt 1449-1917.* Stockholm, 1918.
- APPELGREN and TUDEER.—*Forteckning öfver Antellska Myntsamlingens i Helsingfors. Svenska Mynt.* 3 Vols. Helsingfors, 1906-36.
- LINDGREN, T.—*Sveriges mynt, 1719-1776.* Stockholm, 1953.

APPENDIX B

- GLUCK and HESSELBLAD.—*Årtalsförteckning over Svenska mynt med Värderingspriser, 1521-1950*. Stockholm, 1953. (V).
BRUUN, L. E.—*Swedische Münzen*. 2 Parts. Frankfurt, 1914.

12. Russia and Poland

(a) Russia

- SCHUBERT, T. F. DE.—*Monnaies et médailles russes*. Leipzig, 1858.
PETROV, V. I.—*Catalogue de monnaies russes*. 2nd ed. Moscow, 1899. (V).
ILYIN and TOLSTOI.—*Russian Coins Struck from 1725 to 1801*. St. Petersburg, 1901.
DENIS, C.—*Catalogue des monnaies émises sur le territoire de la Russie, 1914-25*. Paris, 1936.
PLATZBARDIS, A.—*Die Münzen und das Papiergeld Estlands, Lettlands, Litauens*. Stockholm, 1953.

(b) Poland

- HUTTEN-CZAPSKI, E.—*Catalogue de la collection des médailles et monnaies polonaises*. St. Petersburg-Cracow, 1871-1916.
GUMOVSKI, M.—*Manual of Polish Numismatics* (in Polish). Cracow, 1914.
HELBING, O.—*Sammlung des Herrn Sigismund von Chelminski. Szarawka (Russland). Münzen und Medaillen von Polen und sonstige aux Polen bezügliche Gepräge*. Munich, 1904.

13. Crusader and Christian States of the Near East

- SCHLUMBERGER, G.—*Numismatique de l'Orient latin*. With Supplement. Paris, 1878-82.
SCHEMBRI, H. C.—*Coins and Medals of the Knights of Malta*. London, 1908. (V).
FURSE, E. H.—*Mémoires numismatiques de l'Ordre Souverain de Saint-Jean de Jerusalem*. 2nd ed. Rome, 1889.
LANGLOIS, V.—*Numismatique de l'Arménie au moyen âge*. Paris, 1855.
KARST, J.—*Précis de numismatique géorgienne*. Paris, 1938.

14. Obsidional Money

- MAILLIET, P.—*Catalogue descriptif des monnaies obsidionales et de nécessité*. With Supplement. 2 Vols. text and 2 Vols. plates. Brussels, 1868-73.

- BRAUSE-MANSFELD, A.—*Feld-, Noth- und Belagerungsmünzen*. 2 Vols. Berlin, 1896-1902.
 NELSON, P.—*The Obsidional Money of the Great Rebellion, 1642-49*. London, 1907.

X. EUROPEAN COLONIAL COINAGE

I. British Dominions and Colonies

(a) General Works

- ATKINS, J.—*The Coins and Tokens of the Possessions and Colonies of the British Empire*. London, 1899.

(b) Regional Studies

- CROSBY, S. S.—*The Early Coins of America*. Boston, 1878, reprinted 1945.
 NOE, S. P.—*The New England and Willow Tree Coinage of Massachusetts*. (NNM, No. 102.) New York, 1943.
 NOE, S. P.—*The Oak Tree Coinage of Massachusetts*. (NNM, No. 110.) New York, 1947.
 NOE, S. P.—*The Pine Tree Coinage of Massachusetts*. (NNM, No. 125.) New York, 1952.
 WOOD, H.—*The Coinage of the West Indies with Special Reference to the Cut and Counterstamped Pieces*. Together with: *The Sou marqué*. New York, 1914.
 RAYMOND, W.—*The Coins and Tokens of Canada*. 2nd ed. New York, 1947. (V).
 CHARLTON, J. S.—*Catalogue of Canadian Coins, Tokens and Fractional Currency*. 3rd ed. Toronto, 1954. (V).
 ANDREW, A.—*Australasian Tokens and Coins*. Sydney, 1921.
 SUTHERLAND, A.—*Numismatic History of New Zealand*. 6 Parts. New Plymouth, 1939-41.
 THOMAS and DALE.—*They Made Their Own Money—the Story of Early Canterbury Traders and Their Tokens*. Canterbury, N.Z., 1950.
 PARSONS, H. A.—*The Colonial Coinages of British Africa with the Adjacent Islands*. London, 1950.
 KAPLAN, A.—*Catalogue of the Coins of South Africa*. Germiston, 1950. (V).
 THURSTON, E.—*History of the Coinage of the Territories of the East India Company and Catalogue of the Coins in the Madras Museum*. Madras, 1890.

APPENDIX B

2. Spanish Colonies

(a) During Spanish Rule

- MEDINA, J. T.—*Las monedas coloniales hispano-americanas*. Santiago, 1919.
- BURZIO, F.—*La ceca de la villa imperial de Potosí y la moneda colonial*. Buenos Aires, 1945.
- MEDINA, J. T.—*Las monedas obsidionales hispano-americanas*. Santiago, 1919.
- CALICO, F. X.—*Aportación a la historia monetaria de Santa Fe de Bogotá (Colombia)*. Barcelona, 1953.
- MEDINA, J. T.—*Las monedas chilenas*. Santiago, 1902.
- PRADEAU, A. F.—*Numismatic History of Mexico from the Pre-Columbian Epoch to 1823*. Los Angeles, 1938.
- RAYMOND, W.—*Spanish American Gold Coins*. New York, 1936.
- ANON.—*Monedas de Chile, 1743-1944*. Santiago, 1945.
- RAYMOND, W.—*The Gold Coins of North and South America*. New York, 1937. (V).
- RAYMOND, W.—*The Silver Dollars of North and South America*. New York, 1939. (V).
- ADAMS, E. H.—*Catalogue of the Collection of Julius Gutttag, Comprising the Coinage of Mexico, Central America, South America and the West Indies*. New York, 1929.

(The last four works cover both the period of Spanish rule and later. Reference should also be made to DASI and HERRERA—see Spain, Section IX, 9c.)

(b) After Independence

- TAULLARD, A.—*Monedas de la República Argentina*. Buenos Aires, 1924.
- FERRARI and PARDO—*Amonedación de Córdoba*. Buenos Aires, 1951.
- PROBER, K.—*História numismática de Guatemala*. São Paulo, 1954.

3. Portuguese Colonies

- MEILI, J.—*Das brasilianische Geldwesen*. 3 Vols. and plates. Zürich, 1897-1905.
- SANTOS LEITAO & CIA.—*Catálogo preço corrente de moedas brasileiras de 1643 a 1954*. Rio de Janeiro, 1954. (V).
- COUVREUR, R. DA COSTA.—*Numismática Indo-Portuguesa, Bazarucos*. Lisbon, 1943.
- SCHULMAN, J.—*Catalogue of the Thomas Grogan Collection of Portuguese Colonial Coins*. Reprinted New York, 1949.

APPENDIX B

4. French Colonies

MAZARD, J.—*Histoire monétaire et numismatique des colonies de l'Union française, 1610-1952*. Paris, 1953.

ZAY, E.—*Histoire monétaire des colonies françaises*. Paris, 1892. Supplement, 1904.

(See also V. GUILLOTEAU, Section IX, 2a.)

5. Dutch Colonies

SCHOLTEN, C.—*The Coins of the Dutch Overseas Territories, 1601-1948*. Amsterdam, 1953.

BUCKNILL, J.—*The Coins of the Dutch East Indies*. London, 1931.

XI. UNITED STATES OF AMERICA

(For the coinage before 1776, see Section X, 1b.)

RAYMOND, W.—*The Standard Catalogue of United States Coins from 1652 to Present Day*. 17th ed. New York, 1954. (V).

YEOMAN, R. S.—*A Guide Book of United States Coins*. 7th ed. New York, 1953. (V).

HEPBURN, A. B.—*History of Currency in the United States*. 3rd. ed. New York, 1924.

XII. ORIENTAL COINAGE

1. Persia

BABELON, E.—*Les Perses Achéménides*. Paris, 1893.

HILL, G. F.—*Catalogue of the Greek Coins of Arabia, Mesopotamia and Persia*. London, 1922 (BMC).

GARDNER, P.—*The Parthian Coinage*. London, 1877.

WROTH, W.—*Catalogue of the Coins of Parthia*. London, 1903 (BMC).

PARUCK, F. D. J.—*Sassanian Coins*. Bombay, 1924.

VALENTINE, W. H.—*Sassanian Coins*. London, 1921.

POOLE, R. S.—*Catalogue of the Coins of the Shahs of Persia in the British Museum*. London, 1887.

RABINO DI BORGAMALE, H. L.—*Coins, Medals and Seals of the Shahs of Iran, 1500-1941*. Algiers, 1944. Album—Oxford, 1951.

2. Jewish Coinage

HILL, G. F.—*Catalogue of the Greek Coins of Palestine*. London, 1914 (BMC).

APPENDIX B

- MADDEN, F. W.—*Coins of the Jews*. London, 1881.
ROGERS, E.—*A Handy Guide to Jewish Coins*. London, 1914.
REIFENBERG, A.—*Ancient Jewish Coins*. 2nd ed. Jerusalem, 1947.
REIFENBERG, A.—*Israel's History in Coins*. London, 1953.

3. Islamic Coinage

- LANE POOLE, S.—*Catalogue of Oriental Coins in the British Museum*. 10 Vols. London, 1875-90.
MARSDEN, W.—*Numismata Orientalia Illustrata*. 2 Vols. London, 1823-5.
LAVOIX, H.—*Catalogue des monnaies musulmanes de la Bibliothèque Nationale*. 3 Vols. Paris, 1887-96. (I. The Eastern Caliphs; II. Spain and Africa; III. Egypt and Syria.)
WALKER, J.—*Catalogue of Arab-Sassanian Coins*. London, 1941.
BUTAK, B.—*Resemli Türk Paralari*. Istanbul, 1947. With two Supplements. Istanbul, 1948-50.
HAZARD, H. W.—*The Numismatic History of Late Medieval North Africa*. New York, 1952.
VALENTINE, W. H.—*Modern Copper Coins of the Muhammadan States*. London, 1911.

XIII. THE COINAGE OF INDIA

1. General Works

- BROWN, C. J.—*The Coins of India*. Calcutta, 1922.
Catalogue of Indian Coins in the British Museum:
GARDNER, P.—*The Coins of the Greek and Scythic Kings of Bactria and India*. London, 1886.
ALLAN, J.—*The Coins of Ancient India*. London, 1936.
RAPSON, E. J.—*The Coins of the Andhra Dynasty, the Western Ksatrapas, the Traikutaka Dynasty and the "Bodhi" Dynasty*. London, 1908.
ALLAN, J.—*The Coins of the Gupta Dynasties, and of Sasanka, King of Gauda*. London, 1914.
LANE-POOLE, S.—*The Coins of the Sultans of Delhi*. London, 1894.
LANE-POOLE, S.—*The Coins of the Mohammadan States of India*. London, 1885.
LANE-POOLE, S.—*The Coins of the Moghul Emperors*. London, 1892.
Catalogue of the Coins in the Indian Museum, Calcutta:
SMITH, V. A.—
(i) *The Early Foreign Dynasties and the Guptas*.

APPENDIX B

- (ii) *Ancient Coins of Indian Types.*
- (iii) *Persian, Mediæval, South Indian and Miscellaneous Coins.* Oxford, 1906.
- WRIGHT, H. N.—
 - (i) *The Sultans of Delhi.*
 - (ii) *Contemporary Dynasties in India.* Oxford, 1907.
- WRIGHT, H. N.—*Mughal Emperors of India.* Oxford, 1908.
- ALLAN, J.—
 - (i) *Coins of Awadh,* by C. J. Brown.
 - (ii) *Coins of Mysore and Miscellaneous Coins of South India,* by J. R. Henderson.
 - (iii) *Bombay, Rajputana and Central India,* by W. H. Valentine. Oxford, 1928.
- WHITEHEAD, R. B.—*Catalogue of Coins in the Panjab Museum, Lahore.* 3 Vols. Oxford, 1914-34.
 - (Vol. I, Indo-Greek; Vol. II, Moghul Emperors; Vol. III, Nadir Shah and the Durrani Dynasty.)
 - Catalogue of Coins in the Provincial Museum, Lucknow:*
- BROWN, C. J.—*Coins of the Guptas, Maukharis, etc.* Allahabad, 1920.
- DAYAL, P.—*Coins of the Sultans of Delhi.* Allahabad, 1925.
- BROWN, C. J.—*Coins of the Mughal Emperors.* Oxford, 1920.
- VALENTINE, W. H.—*The Copper Coins of India.* 2 Parts. London, 1914-20.

2. Special Studies

- WHITEHEAD, R. B.—*The Pre-Mohammedan Coinage of North-Western India.* (NNM, No. 13.) New York, 1922.
- CUNNINGHAM, A.—*Coins of Ancient India, from the Earliest Times Down to the Seventh Century A.D.* London, 1891.
- CUNNINGHAM, A.—*Coins of Mediæval India from the Seventh Century Down to the Muhammadan Conquest.* London, 1894.
- ELLIOTT, W.—*Coins of Southern India.* London, 1886.
- CODRINGTON, H. W.—*Ceylon Coins and Currency.* Colombo, 1924.

XIV. THE COINAGE OF THE FAR EAST

I. General Works

- LOCKHART, J. H. S.—*The Currency of the Far East from the Earliest Times up to the Present Day.* 3 Vols. Hong Kong, 1895-8.
- SCHJOTH, F.—*The Currency of the Far East.* London, 1929.

APPENDIX B

2. China

COUPERIE, A. TERRIEN DE LA.—*Catalogue of Chinese Coins, from the Seventh Century B.C. to A.D. 621, included in the Collection in the British Museum.* London, 1892.

LOCKHART, J. H. S.—*The Stewart Lockhart Collection of Chinese Copper Coins.* Shanghai, 1915.

WANG, YU-CH'UAN.—*Early Chinese Coinage.* (NNM. No. 122.) New York, 1951.

KANN, E.—*The Currencies of China.* 2nd ed.

KALGAN SHIH.—*Modern Coins of China.* 2 Vols. Shanghai, 1949.

KANN, E.—*Illustrated Catalog of Chinese Coins.* Los Angeles, 1954. (V).

3. Japan

MUNRO, N. G.—*Coins of Japan.* Yokohama, 1904.

JACOBS and VERMEULE.—*Japanese Coinage.* New York, 1953. (V).

4. Other Countries

SCHROEDER, A.—*Annam, études numismatiques.* Paris, 1905.

LE MAY, R.—*The Coinage of Siam.* Bangkok, 1932.

PHAYRE, A. P.—*Coins of Arakan, of Pegu, and of Burma.* London, 1882.

XV. PRIMITIVE MONEY

QUIGGIN, A. H.—*A Survey of Primitive Money: the Beginning of Currency.* London, 1949.

EINSIG, P.—*Primitive Money.* London, 1949.

SIGLER, P. O.—*Sycee Silver.* (NNM, No. 99.) New York, 1943.

RIDGEWAY, W.—*The Origin of Metallic Currency and Weight Standards.* Cambridge, 1892.

XVI. JETTONS AND WEIGHTS

1. Jettons

BARNARD, F. P.—*The Casting-Counter and the Counting-Board.* Oxford, 1916.

FEUARDENT, F.—*Collection Feuardent. Jetons et méréaux, depuis Louis IX jusqu'à la fin du consulat de Bonaparte.* 3 Vols. Paris, 1904-15.

BLANCHET and DIEUDONNE.—*Manuel de numismatique française.* Vol. III. *Médailles, Jetons, Méréaux.* Paris, 1930.

FLORANGE, J.—*Armorial du Jetonophile.* Paris, 1902.

DUGNIOLE, F. J.—*Le jeton historique des dix-sept provinces des Pays-Bas.* 4 Vols. Brussels, 1876-80.

APPENDIX B

2. Coin-Weights

- MILES, G. C.—*Early Arabic Glass Weights and Stamps*. (NNM, No. III.) New York, 1948.
- DIEUDONNE, A.—*Manuel des poids monétaires*. Paris, 1925.
- MATEU Y LLOPIS, F.—*Catálogo de los ponderales monetarios del Museo Arqueológico Nacional*. Madrid, 1934.
- SHEPPARD and MUSHAM.—*Money, Scales and Weights*. London, 1923.

XVII. COMMEMORATIVE MEDALS

(Since medals are incidental to the main theme of this book, only a few of the more important works are listed. For a fuller treatment, see GRIERSON, *op. cit.*, pp. 81-8.)

1. Great Britain

- HAWKINS, E.—*Medallic Illustrations of the History of Great Britain and Ireland, to the death of George II.* 2 Vols. London, 1885. 3 Vols. of plates. 1904-II.
- BROOKE and HILL.—*Guide to the Exhibition of Historical Medals in the British Museum*. London, 1924.

2. Italy

- HILL, G. F.—*Medals of the Renaissance*. Oxford, 1920.
- HILL, G. F.—*A Corpus of Italian Medals of the Renaissance before Cellini*. 2 Vols. London, 1930.

3. France

- BABELON, J.—*La médaille en France*. Paris, 1948.
- MAZEROLLE, F.—*Les médailleurs français, du XVe au milieu du XVIIe siècle*. 2 Vols. and plates. Paris, 1904.
- BABELON, E.—*Les médailles historiques de Napoléon le Grand, empereur et roi*. Paris, 1912.

4. Germany and Austria

- DOMANIG, K.—*Die deutsche Medaille in kunst- und kultur-historischer Hinsicht*. Vienna, 1907.
- HABICH, G.—*Die deutschen Schaumünzen des XVI. Jahrhunderts*. 2 Vols. (in 4). Munich, 1929-34.
- FIALA, E.—*Katalog der Münzen- und Medaillen-Stempel-Sammlung des K. K. Hauptmünzamt in Wien*. 4 Vols. Vienna, 1901-06.

APPENDIX B

5. The Netherlands

- VAN LOON, G.—*Histoire métallique des XVII provinces des Pays-Bas*. 5 Vols. The Hague, 1732-7.

6. Scandinavia

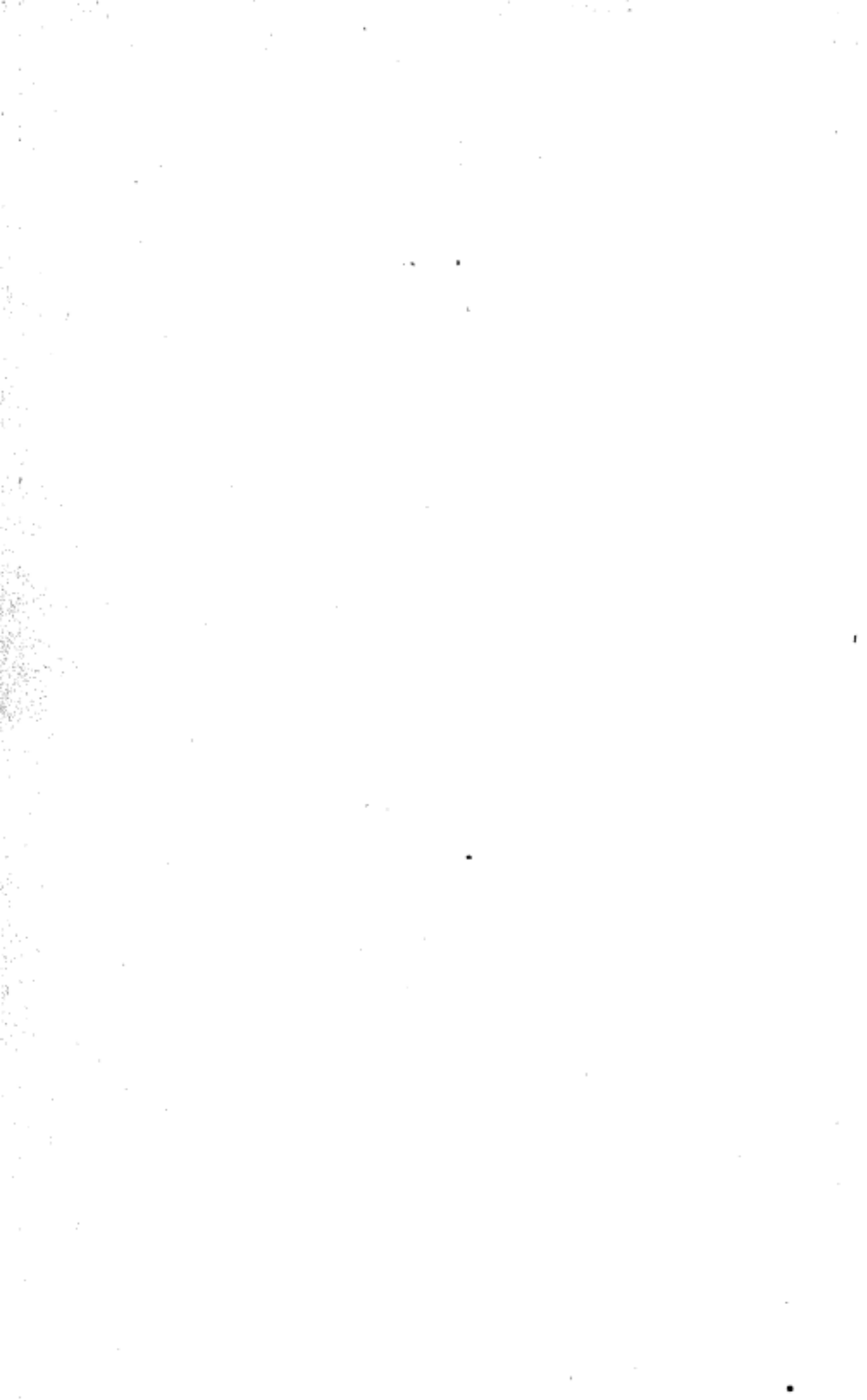
- GALSTER, G.—*Danske og norske medailler og jetons, ca. 1553—ca. 1788*. Copenhagen, 1936.
HILDEBRAND, B. E.—*Sveriges och svenska konungahusets minnespenningar praktmynt och beloningsmedaljer*. 2 Vols. Stockholm, 1874-5.

7. Some other Countries

- LAMAS, A.—*Medalhas portuguesas e estrangeiras referentes a Portugal*. Lisbon, 1916.
BOSTROM, H. J.—*Suomen Muistorahat*. (On Finnish medals.) 2 Vols. Helsingfors, 1932-6.
BETTS, C. W.—*American Colonial History Illustrated by Contemporary Medals*. New York, 1894.
(For War Medals and Decorations, see the list given at the end of Chapter XI.)

XVIII. PAPER MONEY

- MACKENZIE, A. D.—*The Bank of England Note*. Cambridge, 1953.
LAFABRIE, J.—*Les billets des Banques de Law*. Auxerre, 1952.
ANON.—*Die deutsche Währung: 1914-23*. Berlin, n.d.
ANON.—*Financial Breakdown of Greece, April 1941 to November 1944*. Athens, 1946.
RAYMOND, W.—*The Standard Paper Money Catalogue*. 2 Parts. New York, 1950-3.
CAROTHERS, N.—*Fractional Money. A History of the Small Coins and Fractional Paper Currency of the United States*. New York, 1930.
FRIEDBERG, R.—*Paper Money of the United States*. New York, 1953.
CHASE, P. H.—*Confederate Treasury Notes. The Paper Money of the Confederate States of America, 1861-5*. Philadelphia, 1947.
DAVIS, A. M.—*Certain Old Chinese Notes*.



LIST OF PLATES

PLATE

- I Greek Coins
- II Roman and Byzantine Coins
- III Ancient British, Anglo-Saxon and Norman Coins
- IV English Hammered Coins
- V English Milled Coins
- VI European Coins: Denmark, Netherlands, Poland, Russia and Sweden
- VII European Coins: Austria, German States and Switzerland
- VIII European Coins: France, Italian States, Malta, Spain and Portugal
- IX North American Coins: U.S.A. and Mexico
- X American Coins: Central and South
- XI Oriental Coins
- XII Curious Currencies
- XIII Siege Coins
- XIV Commemorative Medals
- XV Historical Coins—I
- XVI Historical Coins—II

PLATE I

GREEK COINS

1. **Lydia**
Time of CROESUS, 561-546 B.C. gold stater.
One of the very earliest coins.
2. **Bruttium**
CAULONIA, *ca.* 550-480 B.C. silver stater.
Interesting archaic style. Caulonia joined the Pythagorean League, one of the earliest instances of trade alliances, each city engaging to strike coins of a similar kind, though differing in design. Hence the incuse reverse.
3. **Lucania**
METAPONTUM, *ca.* 400-350 B.C. silver stater.
Finest style, the purity and beauty of the work leave nothing to be desired.
4. **Thrace**
ÆNUS, *ca.* 450-400 B.C. silver tetradrachm.
A characteristic head of Hermes.
5. **Sicily**
SYRACUSE, *ca.* 413-357 B.C. silver dekadrachm by the artist Kimon.
One of the most famous of Greek coins, struck after the Athenian defeat, and presented as prizes at the Assinarian Games established to commemorate the event.
6. **Macedon**
ALEXANDER THE GREAT, 336-323 B.C. gold stater.
A coin which circulated widely owing to Alexander's conquests.
7. **Bruttium**
CROTON, *ca.* 443-390 B.C. silver stater.
Head of Hera Lakinia facing, perhaps due to the influence of Zeuxis who was painting there at that time.
8. **Attica**
ATHENS, 514-407 B.C. silver tetradrachm.
The famous "Owl" of Athens which enjoyed a world-wide currency for nearly two centuries.
9. **Bruttium**
RHEGIUM, *ca.* 415-387 B.C. silver tetradrachm.
The head of Apollo is unusually pleasing.
10. **Syria**
ANTIOCHUS I, 281-261 B.C. silver tetradrachm.
A characteristic portrait coin.



1



2



3



4



6



5

5



7



8



9



10

PLATE II

ROMAN COINS

1. **Julius Caesar** 44 B.C. silver denarius.
A fine portrait; issued by M. Mettius shortly after Caesar's death.
2. **Mark Anthony and Cleopatra** 32-31 B.C. silver denarius.
Following his conquest of Armenia, Anthony celebrated a triumph at Alexandria and bestowed extravagant honours on Cleopatra, when this denarius was probably struck.
3. **Claudius** A.D. 41 silver denarius.
Commemorating his conquest of Britain; the triumphal arch bears the inscription DE BRITANN.
4. **Nero** A.D. 54-68 gold aureus.
A good portrait of him in his later years.
5. **Augustus** 43-14 B.C. silver medallion.
An excellent portrait.
6. **Claudius** A.D. 41-54 silver medallion.
The reverse shows the temple at Ephesus where the famous statue of Diana was enshrined.
7. **Trajan** A.D. 98-117 bronze sestertius.
Apart from an excellent portrait, the reverse shows the detail of Roman military dress.
8. **Marciana** Died A.D. 114. Silver denarius.
Sister of Trajan. She was elevated to the rank of goddess after her death, hence the Consecration reverse.
9. **Julia Domna** Died A.D. 217. Gold aureus.
Wife of Septimius Severus. A charming coin.
10. **Constantine the Great** A.D. 306-37 gold solidus.

BYZANTINE COINS

11. **Constans II** A.D. 641-68, with his sons CONSTANTINE IV, HERACLIUS and TIBERIUS. Gold solidus.
A typical example. The piercing of the eyeball gives the Emperor a rather ferocious appearance.
12. **Constantine IX** A.D. 1042-55 gold nomisma.
Another typical kind of Byzantine coin. In his reign occurred the great schism of the Eastern and Western churches.



PLATE III

ANCIENT BRITISH, ANGLO-SAXON AND NORMAN COINS

1. **Cunobeline** Ca. 20 B.C. gold stater.
A fine specimen of Cunobeline's coinage struck at Colchester (Camulodunum). He was the Cymbeline of Shakespeare's play.
2. **Kingdom of Mercia** OFFA, 757-96 silver penny.
Moneyer: Edilvald.
3. " COELWULF I, 822-3 silver penny.
Moneyer: Sigestef.
4. **Kingdom of Northumbria** ST. PETER OF YORK silver penny.
An anonymous issue, about 950.
5. **Kingdom of Wessex** EGGBEHRT, 802-38 silver penny.
Moneyer: Derneard.
6. " ALFRED, 871-900 silver penny of London.
The reverse shows the earliest known monogram of the capital city.
7. " EDWARD THE ELDER, 900-925 silver penny.
Moneyer: Wulfgar. The reverse depicts an early Saxon church.
8. " AETHELSTAN, 925-39 silver penny of Chester.
Moneyer: Aelfwine.
9. **All England** EDGAR, 959-75 silver penny of London.
Moneyer: Bircsife.
10. " ÆTHELRED II (the Unready), 979-1016 silver penny of Rochester.
Moneyer: Siderwine. The hand of God blessing.
11. " CNUT, 1016-35 silver penny of Exeter.
12. " HAROLD II, 1066 silver penny of York, with PAX reverse.
13. **Normans** WILLIAM I, 1066-87 silver penny of Warwick.
14. " HENRY I, 1100-35 silver penny.
15. " STEPHEN, 1135-54 silver penny of Norwich.



1

2

3

4

5

PLATE IV

ENGLISH HAMMERED COINS

1. **Edward III** 1327-77 gold noble.
Struck during the validity of the Treaty of Bretigny. The first regular issue of an English gold coinage, after the defeat of the French at the Battle of Sluys.
2. **Henry VIII** 1509-47 silver testoon.
3. **Edward VI** 1551 silver crown of Southwark.
The earliest English crown. The mint mark Y stands for Sir John Yorke, Master of the Southwark Mint.
4. **Philip and Mary** 1554 silver shilling.
5. **Elizabeth I** 1558-1603 silver mill shilling.
The earliest example in England of the use of a screw-press for stamping the coin, introduced in this country by a Frenchman, Eloye Mestrell.
6. **James I** 1603-25 silver shilling.
7. **Charles I** 1625-49 silver shilling.
The plume above the shield on the reverse shows that the coin was struck from Welsh silver.



PLATE V

ENGLISH MILLED COINS

1. **Charles II** 1676 half-crown.
2. **James II** 1687 guinea.
3. **William and Mary** 1690 half-guinea.
4. **Anne** 1750 crown
Struck before the Union with Scotland.
5. **George I** 1725 shilling.
The initials W.C.C. below the bust stand for Welsh Copper Company, which supplied the silver.
6. **George II** 1737 guinea.
7. **George III** 1763 shilling.
This is known as the "Northumberland" shilling as £100 worth of these pieces were struck for distribution in Ireland by the Earl of Northumberland on his arrival as Lord Lieutenant.
8. **Victoria** 1839 £5 piece.
This beautiful piece by William Wyon, with Una guiding the British lion, was issued with the full set of coins in 1839, much as Coronation sets have since been produced.



PLATE VI

EUROPEAN COINS—I

1. **Netherlands** 1694 silver 3-Gulden of the Province of Holland.
2. **Denmark** FREDERICK III, 1659 silver 4-Mark.
Commemorating the relief of Copenhagen on February 2nd during the war with Sweden.
3. **Sweden** GUSTAVUS ADOLPHUS, 1632 Taler struck in Augsburg.
4. **Russia** NICHOLAS I, 1843 platinum 3-roubles.
These platinum pieces were also struck in denominations of 6- and 12-roubles.
5. **Poland** WLADISLAUS IV, 1647 gold 3-ducats struck in Danzig.
An interesting contemporary view of the city.



PLATE VII

EUROPEAN COINS—II

1. **Holy Roman Empire** FERDINAND II, 1631 gold 10-ducats, struck at Nagybanja.
A mining centre for gold, silver and lead in Hungary.
2. **Brandenburg** CHARLES WILLIAM FREDERICK, 1723-57 gold ducat.
An interesting piece showing this ruler's favourite sport of falconry.
3. **Bavaria** MAXIMILIAN I, 1640 gold 5-ducats.
The reverse shows a view of Munich on which the cathedral which still exists is clearly seen.
4. **Switzerland** Canton of Berne, 1796 gold double duplone.
A Swiss soldier in late mediæval dress similar to that still worn by the Swiss Guards at the Vatican.
5. **Palatinate** CHARLES PHILIP, 1733 gold carolin.
6. **Schlick** STEPHEN, 1526 silver $1\frac{1}{2}$ -Taler.
Commemorating his death, at the age of 40, whilst fighting against the Turks. A splendid Renaissance portrait piece.



PLATE VIII

EUROPEAN COINS—III

1. **France** LOUIS XIV, 1713 gold double Louis au Soleil, struck at Bayonne.
A characteristic portrait of the "Roi Soleil," as he was called.
2. „ LOUIS XV, 1717 gold double Louis de Noailles, struck at Paris.
3. **Savoy** CHARLES EMMANUEL II, with his mother Christina as Regent, 1641 gold 4-scudi.
Christina, daughter of Henry IV of France, bears her French title on the coin.
4. **Tuscany** COSIMO III, 1718 gold pezza della rosa, struck at Livorno (Leghorn).
A pleasing reverse, finely executed.
5. **Parma** ODOARDO FARNESE, 1631 gold quadrupla.
6. **Malta** EMMANUEL PINTO, 1765 gold 20-scudi.
Grand Master of the Order of St. John of Jerusalem in Malta.
7. **Spain** FERDINAND AND ISABELLA, 1479-1516 gold 4-excellentes, struck at Burgos.
8. **Portugal** SEBASTIAN, 1557-78, gold San Vicente.
Educated by the Jesuits, he was "Zealous for the faith even unto death" as the coin proclaims, in connection with his expedition against the Moors.



PLATE IX

NORTH AMERICAN COINS

1. New England

Massachusetts 1652 silver shilling.

One of the earliest coins for English America, authorised by the General Court of Massachusetts, when owing to the Civil War in England the colonists' demands for a standard coinage were ignored.

2. U.S.A.

1800 gold half-eagle (\$5).

3. „

1801 silver dollar.

4. „

California 1851 gold octagonal 50-dollars.

Struck under the authority of Augustus Humbert, U.S. Assayer, appointed to issue coins until the establishment of a permanent branch mint.

5. „

Mormon 1850 gold 5-dollars.

An interesting territorial issue struck to convert gold dust into a suitable currency.

6. Mexico

MAXIMILIAN 1866 gold 20-pesos.

Archduke of Austria, who became Emperor of Mexico in 1864; executed in 1867.



PLATE X

AMERICAN COINS: CENTRAL AND SOUTH

1. **Argentina** 1842 gold 2-escudos.
With bust of the Liberator Juan Manuel Rosas.
2. **Costa Rica** 1828 gold 4-escudos.
Struck as a member of the Central American Federation; the same type occurs in Guatemala and Honduras.
3. **Brazil** D. PEDRO I, 1823 gold 4-milreis.
Struck at Rio de Janeiro.
4. **Ecuador** 1843 gold 8-escudos.
Struck at Quito.
5. **Guatemala** 1926 gold 20-quetzales.
6. **Peru** 1850 gold 8-Escudos.
Struck at Cuzco.
7. **Guatemala** 1869 gold 10-pesos.
With bust of Rafael Carrera, who proclaimed Guatemalan Independence in 1839.
8. **Honduras** 1895 gold 5-pesos.



PLATE XI

ORIENTAL COINS

1. **Kushans** HUVISHKA, A.D. 150-80 gold stater.
2. **Guptas** KUMARAGUPTA I, 413-55 gold stater.
3. **Sultans of Delhi** MUHAMMAD I, 1295-1315 gold mohur, A.H. 710, struck at Delhi.
4. **Mughals** AKBAR, 1556-1605 square gold mohur, A.H. 981, struck at Agra.

These square coins are due to Akbar's yearning for innovation, however inconvenient.
5. " JAHANGIR, 1605-27 zodiacal gold mohur, A.H. 1030, struck at Agra.

One of the series of mohurs bearing the twelve signs of the zodiac, this sign being Aries.
6. **Zands of Persia** KERIM KHAN, 1750-79 gold mohur, A.H. 1170. Struck at Mazanderan.
7. **East India Company** 1678 silver rupee of Bombay.

Struck by authority of a Charter granted by Charles II to the Court of Directors in 1677. The legends read: BY AUTHORITY OF CHARLES THE SECOND—1678—KING OF GREAT BRITAIN FRANCE & IRELAND.
8. **Java** 1816 half gold rupee, struck at Sourabaya.

Struck during the English occupation of the island under its Governor, Sir Stamford Raffles, the future founder of Singapore.
9. **Annam** THIEU TRI, 1841-7 gold thong bao.
10. **China** YUAN SHI KAI, 1914 silver dollar, struck in Tientsin.

Commemorating his election as President of the Republic of China.
11. **Japan** MUTSUHITO, 1870 gold 20-yen, Meiji 3, struck at Osaka.



CURIOUS CURRENCIES

1. Brazil

D. JOSE I, 1767 gold bar, issued at Villa Rica.

These gold bars served the same purpose as the American 50-dollar pieces—that is, the conversion of gold dust into a more easily negotiable currency. This magnificent bar, weighing 6 onças and of a fineness of $22\frac{3}{4}$ carats, was accompanied by a certificate attesting its weight and fineness and the place of issue.

2. Java

1796 copper 2-stuiver "bonk."

Owing to the lack of change due to supplies of doits not being received from the Netherlands, these emergency coins were authorised. They were made by chopping Japanese copper rods in stock and stamping them with the value and date.

3. West Africa

Fifteenth-sixteenth centuries copper manilla.

Extensively used on the Slave Coast and connected with the slave trade.

4. China

Chou Dynasty. HSUAN, 827-782 B.C. copper "Pu" money.

These are variously called shirt, trouser or saddle money.

5. British Guiana

Ca. 1803 3-guilders.

This colony was called Demerara and Essequibo, and taken from the Dutch in 1796. The coin circulated for 3-guilders, and the piece cut out was stamped E & D 3 Bts. (for 3-bits). This practice was extensively followed in the West Indies, and similar "ring" dollars exist for Dominica, St. Nevis, Guadeloupe, St. Vincent, Tobago, Trinidad, Martinique and Jamaica, whilst a similar issue was made in New South Wales in 1813.

6. St. Lucia

Ca. 1813 6 livres 15 sous.

On this island the French system of accounts was used; the dollars were cut into three in parallel divisions, the centre portion being issued at three times the value of the two side pieces. Other West Indian islands also issued cut and counterstamped pieces of the Spanish dollar.

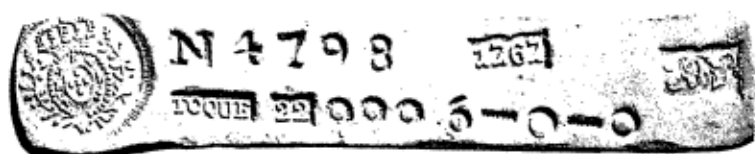


PLATE XIII

SIEGE COINS

1. **England**

NEWARK 1646 silver half-crown.

Besieged several times during the Civil War, Newark finally surrendered to the Scottish Army by order of Charles I in 1646.

2. **„**

PONTIFRACT 1648 silver shilling.

Attacked by Cromwell himself, the castle, stoutly defended by Col. Morrice, did not surrender until after the death of Charles I.

3. **„**

CARLISLE 1645 silver shilling.

Defended by the Royalists from October 1644 until June 1645.

4. **Germany**

LANDAU 1702 silver 2 livres, 2 sols.

Besieged by the Allies. These pieces were struck on plate belonging to Comte Mèlac, Commander of the French garrison.

5. **Holland**

CAMPEN 1578 silver 42-stuivers.

Besieged by the army of the States-General. These pieces were struck from plate belonging to the city magistrates.

6. **Germany**

FRANKENTHAL 1623 silver 4-gulden.

Besieged by General Vergudo.

7. **France**

AIRE 1710 silver 50-sols.

Besieged by the Allies under the Prince of Orange. These pieces were struck from plate furnished by the Governor de Goesbriant.

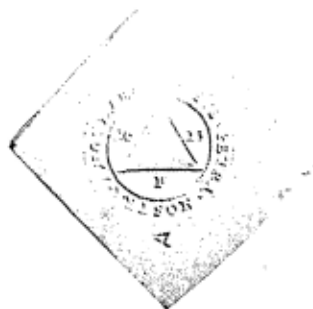
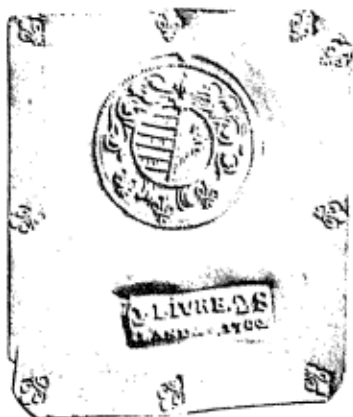


PLATE XIV

COMMEMORATIVE MEDALS

1. **Italian**
LEONELLO D'ESTE, Marquis of Ferrara.
Bronze cast. A splendid Renaissance medal by the celebrated artist Antonio Pisano, known as Pisanello (?1397-1455).
2. **German**
ALBRECHT DURER, 1527, silver.
A characteristic portrait medal by an unknown Nuremberg artist.
3. **English**
EXPEDITION TO VIGO BAY, 1702, silver.
A typical medal of the period by a German artist with an interesting view of the engagement.
4. "
ACCESSION OF GEORGE I, 1714, silver.
A well-executed official medal by G. W. Vestner.



HISTORICAL COINS—I

1. **Greek** Macedon, DEMETRIUS POLIORCETES, 306-283 B.C. silver tetradrachm.
Commemorating the naval victory over the fleet of Ptolemy I of Egypt off the island of Cyprus in 306 B.C. The Nike of Samothrace in the Louvre in Paris is the statue depicted on this coin, and was largely put together again by comparing the broken pieces with this representation of it.
2. " Thrace, LYSIMACHUS, 323-281 B.C. silver tetradrachm.
The head on the obverse is a portrait of Alexander the Great.
3. **Jewish** SECOND REVOLT, A.D. 133-5 silver shekel.
Struck by Simon Bar-Cochba, leader of the revolt against the Romans. The obverse is intended to portray the front of the Temple in Jerusalem.
4. **Greek** CNOSSOS, *ca.* 350-200 B.C. silver drachm.
The famous labyrinth connected with the legend of the Minotaur.
5. **Roman** TIBERIUS, A.D. 10-37 silver denarius.
As this was the commonest of the denarii circulating in our Lord's time, it has for long been known as the "Tribute Penny" referring to His request "Show me a penny."
6. " CONSTANTIUS CHLORUS, A.D. 293-305 gold medallion, struck at Treves.
This celebrated and unique piece, found at Beaurains in 1922, is preserved in the Arras Museum. It depicts the triumphal entry of the Emperor into London where he is received by a kneeling figure, labelled LON, in front of a building which is in all probability the predecessor of the Tower.
7. **English** STEPHEN and MATILDA, *ca.* 1141 silver penny.
Although several conjectures have been advanced it is probable that this penny was struck at York and represents Queen Matilda assisting the King to support the sceptre of the kingdom during his captivity.
8. **Anglo-Gallic** EDWARD THE BLACK PRINCE, 1330-76 gold hardi.
One of the many fine coins issued in France for circulation in our possessions there.
9. **English** COMMONWEALTH, 1651 silver crown.
The only occasion on which English coins have had legends in English.



HISTORICAL COINS—II

1. Austrian

MAXIMILIAN, 1479 silver Taler.

Struck to commemorate his marriage to Mary of Burgundy, daughter of Charles the Bold. He was 19 and she 20. A lovely portrait piece.

A full-length effigy of Mary lies on her sarcophagus in Bruges Cathedral.

2. German

City of COLOGNE, Sixteenth - Seventeenth centuries silver Taler.

The obverse depicts the three Kings, Caspar, Balthasar and Melchior, who sought the Infant Christ. The reverse shows St. Ursula, accompanied by some of her Virgins, taking leave of her father, King Deonot of Cornwall, and blessed by the Pope, Cyriacus, on her departure for Germany to convert the heathen. She and her companions were murdered in Cologne.

3. Italian

CHARLES V, 1516-56 gold dobla of Naples.

Commemorating the pardon granted to the Neapolitans after their insurrection against the Inquisition.

4. German

City of WORMS, 1617 silver Taler.

Commemorating the first centenary of the Reformation. The tower on the reverse refers to Martin Luther's well-known hymn: *Ein feste Burg ist unser Gott*.

5. Swiss

Canton of URI, 1730 gold ducat.

Depicts St. Martin giving his cloak to the beggar.

6. English

EDWARD VIII, 1937 Al-bronze threepence.

The only coin with his effigy. These were struck in 1936 in preparation for the Coronation, and as this was a new size for this denomination a number were issued by the Royal Mint, chiefly to determine whether coin-operated machines could be adapted to take this piece. They were recalled on Edward VIII's abdication, but a few are still untraced.



Col-
N 2413/78

✓
Crime - collecting

CENTRAL ARCHAEOLOGICAL LIBRARY,
NEW DELHI

Issue Record.

Catalogue No.

737.402/For-15028

Author— Forrer, Leonard S.

Title Art of collecting coins; a
practical guide to numisma-

"A book that is shut is but a block"

CENTRAL ARCHAEOLOGICAL LIBRARY
GOVT. OF INDIA
Department of Archaeology
NEW DELHI.

Please help us to keep the book
clean and moving.